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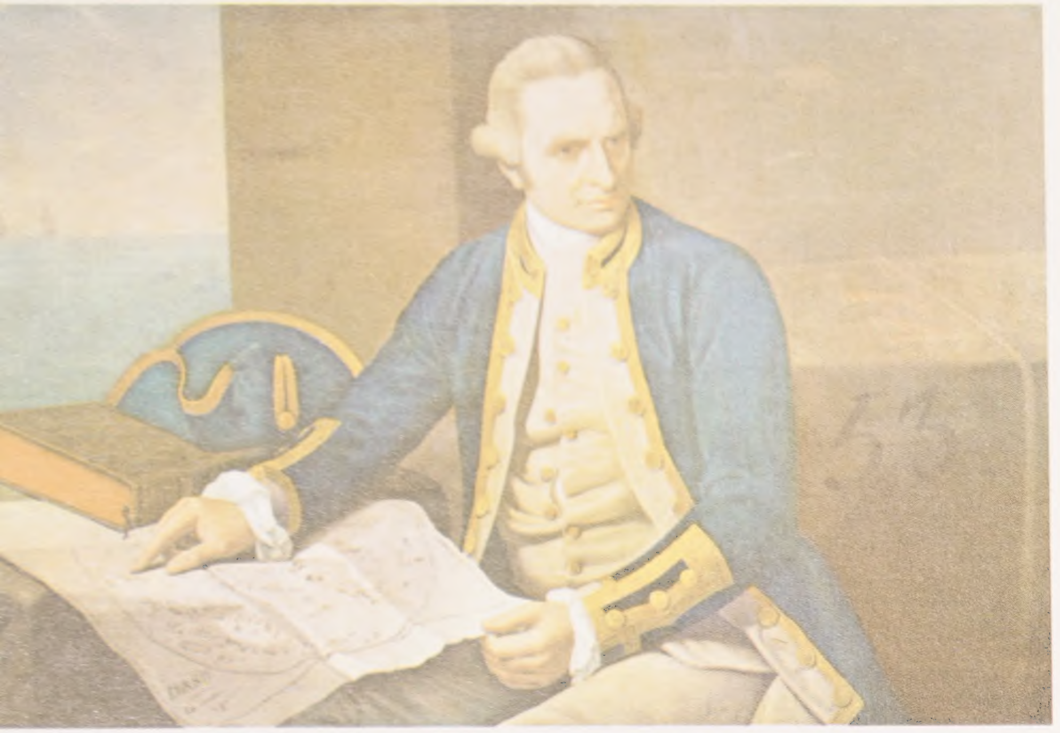

CAPTAIN JAMES COOK, R.N., F.R.S.

1728-1779

This portrait, held in the National Library of Australia, Canberra, is a contemporary copy of the painting by Nathaniel Dance held in the National Maritime Museum, Greenwich.

Cook entered the Royal Navy in 1755 as an Able Seaman, and had served thirteen years when he was appointed with the rank of Lieutenant to H.M. Bark *Endeavour*, in command of the Royal Society's Expedition to observe the Transit of Venus at Tahiti. When the observations were completed Cook, in accordance with his secret instructions, sailed in search for the continent believed to lie in the South Pacific. Having reached forty degrees South without finding it he directed the ship to the westward so that he might fall in with New Zealand and later the eastern coast of the continent then known as New Holland. He first sighted its shores on 20 April 1770 at Point Hicks. From there he sailed northward landing at Botany Bay on 29 April. At Possession Island in the following August, he annexed, under the name New South Wales, the coast that he had discovered and charted.

The bi-centenary of this discovery is being celebrated during 1970.

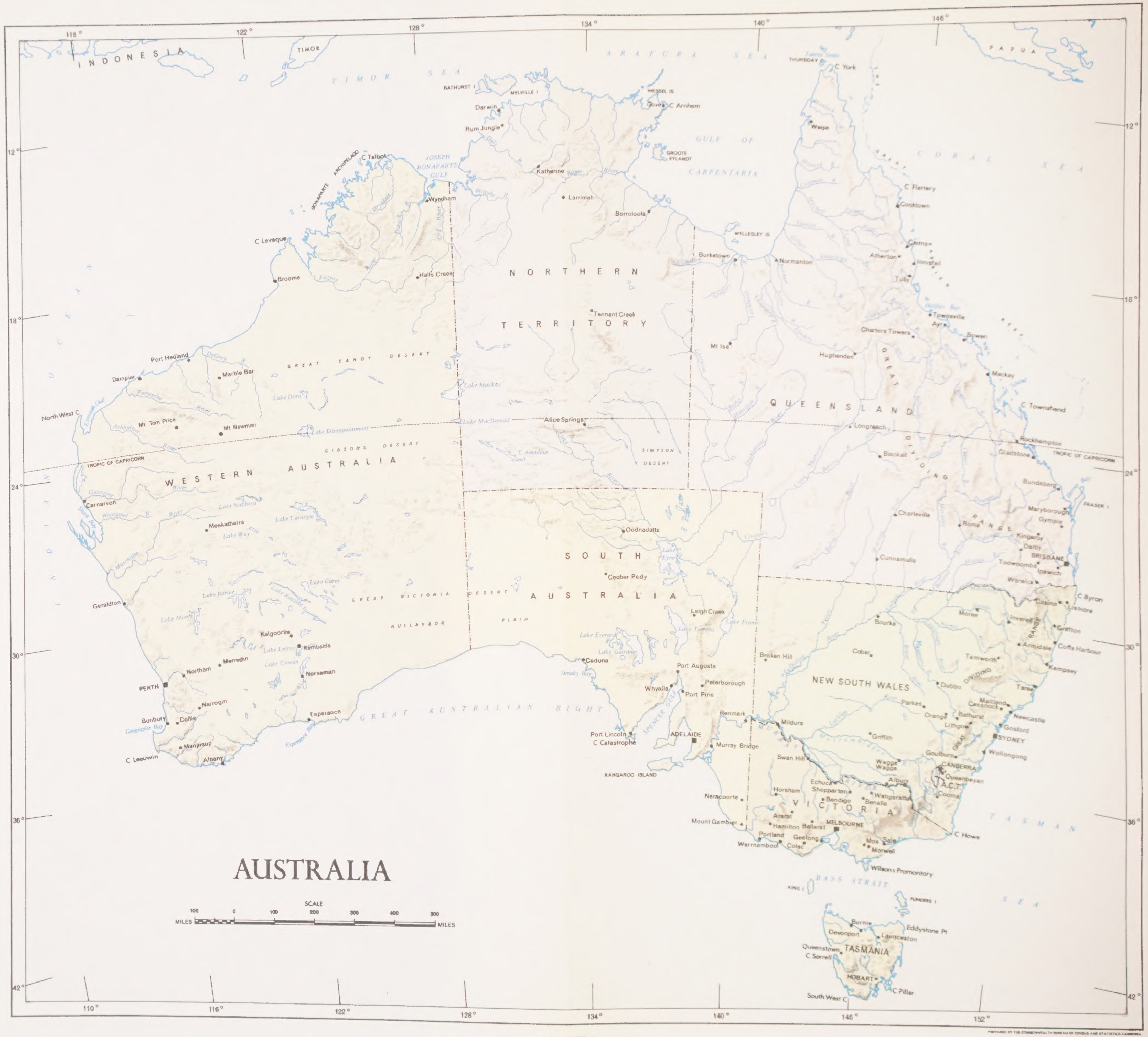
AUSTRALIA
SCALE
MILES 100 0 100 200 300 400 500 MILES
INDONESIA
TIMOR
PAPUA
TIMOR SEA
ARAFURA SEA
GULF OF CARPENTARIA
CORAL SEA
TASMAN SEA
INDIAN OCEAN
GREAT AUSTRALIAN BIGHT
BASS STRAIT
TROPIC OF CAPRICORN
NORTHERN TERRITORY
WESTERN AUSTRALIA
SOUTH AUSTRALIA
QUEENSLAND
NEW SOUTH WALES
VICTORIA
A.C.T.
TASMANIA
GREAT SANDY DESERT
GIBSONS DESERT
GREAT VICTORIA DESERT
NULLARBOR PLAIN
SIMPSON DESERT
GREAT DIVIDING RANGE
Darwin
PERTH
ADELAIDE
MELBOURNE
SYDNEY
CANBERRA
BRISBANE
HOBART
Alice Springs
Kalgoorlie
Broome
Port Hedland
Cairns
Townsville
Rockhampton
Newcastle
Wollongong
Geelong
Launceston
PREPARED BY THE COMMONWEALTH BUREAU OF CENSUS AND STATISTICS CANBERRA

PLATE 1

OFFICIAL YEAR BOOK
OF THE COMMONWEALTH OF AUSTRALIA

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no. 55
1969

Australia. Bureau of Census and statistics.//

OFFICIAL
YEAR BOOK
OF THE
COMMONWEALTH
OF AUSTRALIA

No. 55, 1969

Prepared under instructions from the Right Honourable the Treasurer by

K. M. ARCHER

COMMONWEALTH STATISTICIAN

COMMONWEALTH BUREAU OF CENSUS AND STATISTICS

CANBERRA, AUSTRALIA

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PREFACE

By the Constitution of the Commonwealth of Australia, the Parliament of the Commonwealth is empowered, subject to the Constitution, 'to make laws for the peace, order, and good government of the Commonwealth, with respect to . . . Census and statistics.' In the exercise of the power so conferred, a Census and Statistics Act was passed in 1905, and in the year following the Commonwealth Bureau of Census and Statistics was created. The first Official Year Book was published early in 1908. The publication here presented is the fifty-fifth Official Year Book issued under the authority of the Commonwealth Government.

The special index (preceding the general index) provided at the end of the volume, together with certain references given in the various chapters, will assist in tracing in previous issues special articles and other more or less important miscellaneous matter which, in order to conserve space, have been omitted or abbreviated in the present volume. Where, in the general index, more than one reference to a subject is given, the chief reference (or references) has been specially indicated wherever possible.

Among new or revised material included the following items may be especially mentioned.

Chapter 3. General Government. A General Election was held in October 1969 for the House of Representatives of the Commonwealth Parliament. A list of Members elected, and Ministers appointed, is given in the Appendix.

Chapter 4. Defence. A new table showing changes in personnel strength in each Service (pages 76–7).

Chapter 7. Population. A map showing the distribution of the Aboriginal population is shown facing page 128.

Chapter 10. Labour Wages and Prices. A new wholesale price index relating to materials used in building other than house building was released during 1969. Details of this new price index are contained in the Appendix. Also included in the Appendix are details of the decision of the Commonwealth Conciliation and Arbitration Commission in the case concerning claims for equal pay for women.

Chapter 15. Education, Cultural Activities and Research. Some brief facts about overseas students in Australia are given on page 530.

Chapter 21. Rural Industry. Particulars of poultry hatchings and slaughterings are included for the first time (pages 918–20).

Chapter 23. Forestry. The section dealing with forest protection and forest fires has been expanded (pages 965–7).

Chapter 25. Mineral Industry. Descriptive material dealing with discovery and government assistance has been amplified. More detailed statistics relating to exploration activity are included (pages 1028–30).

Chapter 28. Employment and Unemployment. A new series of estimates relating to the Australian labour force, based on an expanded quarterly population survey, was released during 1969. Results of these surveys are shown on pages 1125–32.

Chapter 29. The Territories of Australia. A brief summary is given of selected characteristics of the population of the Territory of Papua and New Guinea, as measured by the 1966 census (pages 1165–9).

As an attachment to the frontispiece on this occasion there is a reproduction of a portrait of Captain James Cook. The bi-centenary of Cook's discovery of the east coast of Australia is being celebrated during 1970.

The usual series of graphs has been revised and extended.

The material in the Year Book has been carefully checked throughout, but I shall be grateful to those who will be kind enough to point out defects or make suggestions.

The statistics contained in the majority of the chapters of this volume relate to the years ended June or December 1968. More detailed statistics on subjects dealt with in the Year Book are available in the various annual reports published by this Bureau, and more recent statistics are contained in the *Digest of Current Economic Statistics* (monthly), the *Monthly Review of Business Statistics*, the *Quarterly Summary of Australian Statistics*, and in other publications issued monthly, quarterly, half-yearly, or yearly. These publications are listed in Statistical publications of Australia (*see* Chapter 30, Miscellaneous), and the last pages of this volume contain a list of current and recent printed publications available for purchase, showing issue numbers, dates, and prices.

A State Year Book is published by the Deputy Commonwealth Statistician of each State. These publications contain greater statistical detail and additional supplementary material concerning the individual States which cannot be accommodated in the Commonwealth Year Book. The Deputy Commonwealth Statisticians of all States also issue Pocket Year Books and a number of printed and mimeographed publications dealing with their respective States. These publications are listed, together with publications of the Central Bureau, in *Publications of the Commonwealth Bureau of Census and Statistics* issued annually by this Bureau.

My thanks are tendered to the Deputy Commonwealth Statisticians of the several States, who have collected and compiled the data on which a great part of the information given in the Year Book is based. Thanks are also tendered to the responsible officers of the various Commonwealth and State Departments and to others who have kindly, and often at considerable trouble, supplied information, and to the Government Printer and his staff for their services in printing this Year Book and in assisting and advising throughout its preparation.

On this occasion I should also like to record my keen appreciation of the sterling work performed over many years by the former Editor of Publications, Mr J. M. Jones, B.A., who retired early in 1969.

K. M. ARCHER
Commonwealth Statistician

Commonwealth Bureau of Census and Statistics,
Canberra, A.C.T. 2600. October 1969

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SYMBOLS AND OTHER FORMS OF USAGE IN THIS YEAR BOOK

The following *symbols*, where shown in tables, mean:

n.a. —not available
.. —nil or less than half the final digit shown, or not applicable
p —preliminary—figure or series subject to revision
r —figure or series revised since previous issue
n.e.i.—not elsewhere included
n.e.c.—not elsewhere classified
n.s. —not stated
m.—males; f.—females; p.—persons

A blank space in a column of figures means that the figure concerned is not yet available.

The following *abbreviations* are used for the titles of the Australian States and Territories and the Commonwealth of Australia: N.S.W. (New South Wales), Vic. (Victoria), Qld (Queensland), S.A. (South Australia), W.A. (Western Australia), Tas. (Tasmania), N.T. (Northern Territory), A.C.T. (Australian Capital Territory), T.P.N.G. (Territory of Papua and New Guinea), Aust. (Australia), Cwlth (Commonwealth).

In general, the *statistics in this volume relate to the States and Territories of the Commonwealth of Australia*, i.e. they exclude particulars of the External Territories of Australia, which, however, are specifically dealt with in Chapter 29, The Territories of Australia. A few series elsewhere include particulars of the Territory of Papua and New Guinea because of the nature of the subject-matter—these series are indicated.

Yearly periods shown as e.g. 1967 refer to the year ended 31 December 1967; those shown as e.g. 1966–67 refer to the year ended 30 June 1967. Other yearly periods are specifically indicated. The range of years shown in table headings, e.g. 1901 to 1966–67, indicates the period covered, but does not necessarily imply that each intervening year is included.

Values are shown in Australian dollars ($ or $A) or cents (c) unless another currency is specified.

Any *discrepancies between totals and sums of components* in tables are due to rounding.

Unless otherwise indicated, the *British system of weights and measures* is used. The weights and measures used in recording production, etc. of different commodities are as follows:

Bushel (bus) = approximately 2,218 cubic inches
Gallon (gal) = Imperial gallon of approximately 277 cubic inches
Pound (lb) = pound avoirdupois
Cental = 100 pounds
Hundredweight (cwt) = 112 pounds
Ton = Long ton of 2,240 pounds
Short ton = 2,000 pounds
Bale (of wool) = approximately 300 pounds

Cereals, fruit and certain other products are generally recorded in bushels. While the weight of a bushel varies according to the nature of the product, it is also subject to considerable variation for individual products on account of such things as variety and method of packing. However, average bushel equivalent weights, as set out below, may be used for the conversion of each of these products to pounds weight avoirdupois.

BUSHEL WEIGHTS

(lb per bushel)

Product	*lb per bushel*
Apples	42
Apricots	48
Bananas	56
Barley	50
Beans (dry)	60
Beans, French (green)	20
Bran	20
Canary seed	56
Cherries	48
Clover seed	60
Custard apples	35
Figs	44
Flax seed (pure seed)	56
Flour	56
Grapefruit	42
Grass seed (most varieties)	20
Lemons	48
Loquats	45
Lucerne seed	60
Maize	56
Mandarins	48
Mangoes	40
Millet	60
Mustard seed	50
Nectarines	50
Nuts, other than peanuts	40
Oats	40
Onions	56
Oranges	48
Panicum	60
Papaws	24
Passion fruit	34
Peaches	45
Peanuts	22
Pears	45
Peas, field (dry)	60
Peas in pod (green)	28
Persimmons	44
Pineapples	42
Plums and prunes	58
Pollard	20
Potatoes	60
Quinces	42
Rape	56
Raspberries	30
Rice	42
Rye	60
Setaria	60
Sorghum	60
Soya beans	60
Strawberries	30
Sunflower seed	33
Tares	60
Tomatoes	48
Wheat	60

CHAPTER 1

DISCOVERY, COLONISATION, AND FEDERATION OF AUSTRALIA

Early knowledge and discovery of Australia

The following paragraphs contain only a bare outline of the more important facts relating to the early history of Australian discovery. A more detailed summary of these facts may be found in Year Book No. 39 (*see* page 1) and earlier issues.

Terra Australis

Although references to an Austral land are found in the works of writers in the early centuries after Christ, and evidence appeared in maps, globes, and manuscripts from the Middle Ages onward, there is no definite evidence connecting this so-called *Terra Australis* with Australia. Cornelius Wytfliet's map of 1597, however, indicates roughly the eastern and western coasts of Australia, as well as the Gulf of Carpentaria.

Early discoveries of Australia

The Portuguese may have discovered part of the Australian coast before 1542, and it has been suggested that the Arabs may have come to Australia even earlier, though there is no evidence to support this theory. For all practical purposes, however, the coastal exploration of Australia may be taken as having begun with the Spaniards and the Dutch.

In 1606 the Spaniard Quiros, on reaching the island that has retained the name of Espiritu Santo (the largest island of the New Hebrides group), thought he had discovered the great land of the south, and therefore named the group *La Australia del Espiritu Santo*. After leaving the New Hebrides Quiros sailed eastward, but Torres, his second-in-command, took a westerly course and passed through the strait that now bears his name. In all probability he sighted the Australian continent but no mention of it is made in his records. This voyage marks the close of Spanish activity in the work of discovery in the South Seas.

The Dutch discovered Australia when the Dutch East India Company sent the *Duyfken* from Bantam, Java, to explore the island of New Guinea. During March 1606 the *Duyfken* coasted along the southern shores of New Guinea and followed the west coast of Cape York peninsula as far as Cape Keer-Weer (Turn Again).

During the following thirty years there were nine visits of Dutch navigators to Australian waters; by 1636, through their efforts, the coast of Australia from Cape York westward around to the Great Australian Bight had been discovered.

In 1642 Abel Janszoon Tasman set out from Batavia to ascertain the extent of the great southern continent. He named Van Diemen's Land, imagining it to be part of Australia proper, and sailing north-easterly discovered New Zealand and returned to Batavia. In his second voyage in 1644 Tasman visited the northern coast of Australia, sailing round the Gulf of Carpentaria and along the north-west coast as far south as the tropic of Capricorn. This voyage of Tasman's may be said to have ended the period of Dutch discoveries, although there were subsequent visits by the Dutch to Australia (de Vlamingh in 1696 and Van Delft in 1705).

Discoveries by the English

In the meantime the English had made their first appearance on the Australian coast in 1688, when the north-westerly shores were visited by William Dampier, as supercargo of the *Cygnet*, a trading vessel whose crew had turned buccaneers. In 1699 he again visited Australia, in command of H.M.S. *Roebuck*, and on his return to England published an account in which a description is given of trees, flowers, birds, and reptiles observed, and of encounters with natives.

At the end of the seventeenth century it was uncertain whether Tasmania and New Zealand were parts of Australia or whether they were separated from it but themselves formed part of a great Antarctic Continent. Lieutenant (later Captain) James Cook's first voyage, though undertaken primarily for the purpose of observing the transit of Venus from Tahiti, had also the objective of ascertaining whether the unexplored part of the southern hemisphere was only an immense mass of water or contained another continent. In command of H.M.S. *Endeavour*, and accompanied by Sir Joseph Banks, the botanist, Dr Solander the naturalist, Green the astronomer, draughtsmen, and servants, Cook, after observing the transit of Venus at Tahiti, turned towards New Zealand, sighting that land on 7 October 1769 in the neighbourhood of Poverty Bay. Circumnavigating the North and South Islands, he proved that New Zealand was connected neither with the supposed Antarctic Continent nor with Australia, and took formal possession thereof in the name of the British Crown.

Discovery of Australia by Captain Cook

On 20 April 1770* Cook sighted the Australian mainland at a place he called Point Hicks, naming it after his first-lieutenant, who first saw it. Coasting northwards, on 29 April 1770* he discovered Botany Bay, where he landed. Cook sailed along the coast in a northerly direction for nearly 1,300 miles until 11 June 1770, when the *Endeavour* was seriously damaged by striking a coral reef in the vicinity of Trinity Bay. Repairs occupied nearly two months, and the *Endeavour* then again set her course to the north, sailing through Torres Strait and anchoring in the Downs on 13 July 1771. In 1772 Cook was put in command of the ships *Resolution* and *Adventure* with a view to ascertaining whether a great southern continent existed. Having satisfied himself that, even if it did, it lay so far to the south as to be useless for trade and settlement, he returned to England in 1774. Cook's last voyage was undertaken in 1776, and he met his death on 14 February 1779, by which date practically the whole coast of Australia had been explored. The only remaining discovery of importance, the existence of a channel between Tasmania and Australia, was made by Bass and Flinders in 1798.

The annexation of Australia

Possession taken of eastern coast of Australia by Captain Cook

Although representatives of the nations mentioned in the previous section landed or claimed to have landed on the shores of Australia on various occasions during the sixteenth and seventeenth centuries, it was not until 23 August 1770 that the history of Australia was brought into definite political connection with western civilisation. It was on that date that Captain Cook took possession 'of the whole eastern coast, from latitude 38° S. to this place, latitude 10½° S., in right of His Majesty King George the Third', i.e. over only what are now the eastern parts of New South Wales, Victoria and Queensland.

Annexation of eastern part of Australian continent and Tasmania

Formal possession, on behalf of the British Crown, of the whole of the eastern part of the Australian continent and Tasmania was not taken until 26 January 1788, when Captain Phillip's Commission, first issued to him on 12 October 1786 and amplified on 2 April 1787, was read to the people whom he had brought with him in the 'First Fleet'. The commission appointed Phillip 'Captain-General and Governor-in-Chief in and over our territory called New South Wales, extending from the Northern Cape or extremity of the coast called Cape York, in the latitude of ten degrees thirty-seven minutes south, to the southern extremity of the said territory of New South Wales or South Cape, in the latitude of forty-three degrees thirty-nine minutes south and of all the country inland westward as far as the one hundred and thirty-fifth degree of east longitude reckoning from the meridian of Greenwich, including all the islands adjacent in the Pacific Ocean within the latitudes aforesaid of ten degrees thirty-seven minutes south and forty-three degrees thirty-nine minutes south'.

Extension of New South Wales westward

On 17 February 1824 Earl Bathurst notified Sir Thomas Brisbane that he had recommended to His Majesty the dispatch of a ship of war to the north-west coast of New Holland for the purpose of taking possession of the coast between the western coast of Bathurst Island and the eastern side of Coburg Peninsula. Captain James J. Gordon Bremer of H.M.S. *Tamar*, who was selected for the purpose, took possession on 20 September 1824 of the coast from the 135th to the 129th degree of east longitude. On 16 July 1825 the whole territory between those boundaries was described in Darling's commission as being within the boundaries of New South Wales.

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* **Year Book No. 1 shows the dates of these events as '19th April' and '28th April' respectively. In Year Book No. 2** they had been changed to '20th of April' and '29th April', and the following footnote inserted:

'1. *Correct dates* of Captain Cook's Log. After the 180° meridian of longitude had been passed, and owing to no allowance having been made for westing, the various log-books of this voyage are in error one day as to dates. Thus those in Captain Cook's private log, in his official log, in Gunner Forwood's, Pickersgill's, Clerke's, Wilkinson's, and Bootie's Journals, in the Palliser copy of Cook's log, and in Wharton's publication, all need correction by adding one day to the date given: that is, the 19th should read the 20th, etc. The anonymous log, doubtless Green's, is erroneously supposed by the author of the " Historical Records of New South Wales." to have been corrected for westing, see the foot-note on page 269 therein. The facts are as follows:—What was known as " *ship time* " began a day earlier than under the present system of astronomical reckoning, that is to say, Jan. 1 began at noon Dec. 31. The "*Astronomical day*," however, was a whole day later than the *ship's day*: thus what would be assigned to the 24th in Cook's Journal would appear in Green's Journal as the 23rd. (See " Captain Cook's Journal," 1768-71, by Captain W. J. L. Wharton, R.N., F.R.S., London, 1893, preface pp. xii., xiii.) There can be no doubt as to the need of the correction in the dates, since on reaching Batavia the log reads:—" Wednesday 10th, according to our reckoning, but by the people here Thursday 11th." (Op. Cit., pp. 352-3.) Attention was drawn to this matter by Mr. P. de Jersey Grut in the "**Argus**," Melbourne, May 15, 18 and 22, 1907.'.

Annexation of Western Australia

An expedition under Major Lockyer, sent by Lieutenant-General Sir Ralph Darling, then Governor of New South Wales, to found a settlement at King George Sound, sailed from Sydney on 9 November 1826, landed at the Sound on 26 December following, and on 21 January 1827 hoisted the British flag. Captain Stirling, in command of H.M.S. *Success*, arrived at Sydney a few weeks after the departure of the expedition to King George Sound. He obtained the Governor's permission to visit Swan River with a view to seizing a position on the western coast and reporting upon its suitability as a place of settlement. Captain Stirling left Sydney on 17 January 1827, and on his return in the following April submitted a glowing report on what he described as a 'rich and romantic country', urging its occupation for the purpose of settlement. He left for England in July 1827, continuing his advocacy, notwithstanding much discouragement, with unabated enthusiasm. He was at last successful, the result being due mainly to the formation of an association of prospective settlers having capital at their disposal. He was appointed Lieutenant-Governor and with a party of settlers arrived at Garden Island, near the Swan River, in the ship *Parmelia* in June 1829. On the second of the preceding month Captain Fremantle, in command of H.M.S. *Challenge*, arrived and hoisted the British flag on the south head of Swan River, again asserting possession of 'all that part of New Holland which is not included within the territory of New South Wales'. Thus before the middle of 1829 the whole territory now known as the Commonwealth of Australia had been constituted a dependency of the United Kingdom.

The creation of the several Colonies

New South Wales

In Governor Phillip's commission of 1786 the mainland of Australia was divided by the 135th meridian of east longitude into two parts. The earliest colonists believed that the present State of Tasmania was actually joined to the mainland, and it was not until 1798 that the contrary was known. In that year Bass and Flinders proved that it was an island by sailing through Bass Strait. The territory of New South Wales, as originally constituted (1,480,527 square miles, including Van Diemen's Land, 26,215 square miles), and of New Zealand (103,862 square miles), which may be included although Cook's annexation was not properly given effect to until 1840, consisted of 1,584,389 square miles. A further area of 518,134 square miles was added in 1825 when the western boundary was extended to the 129th east meridian. The territory was subsequently reduced by the separation of various areas to form the other colonies, and at the time of the establishment of the Commonwealth the area of New South Wales was 310,372 square miles. Following the transfer of the Australian Capital Territory to the Commonwealth in 1911 the area was further reduced to 309,433 square miles.

Lord Howe Island, which is a dependency of New South Wales, and for political purposes is included in one of the electorates of Sydney, is situated in latitude 31° 30′ south, longitude 159° 5′ east, about 487 miles east-north-east of Sydney, and has an area of 3,220 acres.

Tasmania

Van Diemen's Land, first settled in 1803, was politically separated from New South Wales in 1825, being constituted a separate colony on 14 June. The area of the colony was 26,215 square miles. The name of the colony was officially changed to Tasmania in 1856 when responsible government was established. Following a resurvey of local government areas, the area of Tasmania was determined at 26,383 square miles at the end of 1964.

Macquarie Island, about 1,000 miles south-east of Hobart, together with a few rocky islets nearby, has been a dependency of Tasmania since the nineteenth century. In December 1911 five members of the Australasian Antarctic Expedition landed on the island and remained there until 1915. On 3 March 1948 another party was landed to man a new station which has since been maintained as a scientific base. The island is about twenty-one miles long and two miles wide.

Western Australia

The territory westward of the 129th meridian, comprising 975,920 square miles, was constituted a colony under the name of Western Australia in June 1829. It was always distinct and independent of New South Wales, except for the settlement on King George Sound (*see* above), which remained under the jurisdiction of New South Wales until 1831.

South Australia

On 15 August 1834 the Act 4 and 5 William IV., cap. 95, was passed, creating South Australia a 'province', and settlement took place towards the end of the year 1836. The first Governor, Captain Hindmarsh, R.N., arrived at Holdfast Bay on 28 December 1836, and on the same day the new colony was officially proclaimed. The new colony embraced 309,850 square miles of territory, lying south of the 26th parallel of south latitude and between the 141st and 132nd meridians of east longitude. On 10 December 1861, by authority of the Imperial Act 24 and 25 Vict., cap. 44, the western boundary of South Australia was extended to coincide with the eastern boundary of Western Australia, namely, the 129th east meridian. The area of the extension was approximately 70,220 square miles. Nearly two years later, on 6 July 1863, the Northern Territory, comprising 523,620 square miles, was brought under the jurisdiction of South Australia, which thereupon controlled an area of 903,690 square miles. The Territory was transferred to the Commonwealth on 1 January 1911 (*see* page 5).

New Zealand

Although Captain Cook had taken possession of the North Island of New Zealand in November 1769, and of the South Island in January 1770, it is doubtful whether at the time when Captain Phillip's commission was drawn up New Zealand was considered as one of the 'islands adjacent in the Pacific Ocean' (*see* page 2). The fact that under the Supreme Court Act (Imperial) of 1823 British residents in New Zealand were brought under the jurisdiction of the Court at Sydney, and that in 1839 there was a proposal on the part of the British Government to appoint a consul in New Zealand, leaves this an open question, as nothing more than extra-territorial jurisdiction may have been intended. New Zealand does not appear to have become British territory unequivocally until 1840, when Captain Hobson arrived at the Bay of Islands, and on 30 January read his commissions, which extended the boundaries of the Colony of New South Wales so as to embrace and comprehend the islands of New Zealand. In February 1840 the Treaty of Waitangi, made with the native chiefs, was signed. Finally, on 21 May 1840 British sovereignty over the islands of New Zealand was explicitly proclaimed. New Zealand remained a dependency of New South Wales until, by letters patent of 16 November 1840, it was constituted a separate colony under the powers of the Act 3 and 4 Vict., cap. 62, of 7 August 1840. Proclamation of the separation was made on 3 May 1841. The area of the colony was 103,862 square miles. The present area of New Zealand, which acquired responsible government on 7 May 1856 and Dominion status on 26 September 1907, exclusive of island territories but including minor islands, is 103,736 square miles.

Victoria

In 1851 the 'Port Phillip District' of New South Wales was constituted the colony of Victoria, 'bounded on the north and north-west by a straight line drawn from Cape Howe to the nearest source of the River Murray and thence by the course of that river to the eastern boundary of the colony of South Australia'. The area of the new colony was 87,884 square miles, and its separate existence took effect from 1 July 1851.

Queensland

The northern squatting districts of Moreton, Darling Downs, Burnett, Wide Bay, Maranoa, Leichhardt, and Port Curtis, together with the reputed county of Stanley, were granted an independent administration and formed into a distinct colony under the name of Queensland by letters patent dated 6 June 1859, although separation from New South Wales was not completed until 10 December of the same year. The territory comprised by the new colony was 'so much of the colony of New South Wales as lies northwards of a line commencing on the sea-coast at Point Danger in latitude about 28° 8′ south, running westward along the Macpherson and Dividing Ranges and the Dumaresq River to the MacIntyre River, thence downward to the 29th parallel of south latitude, and following that parallel westerly to the 141st meridian of east longitude, which is the eastern boundary of South Australia, together with all the adjacent islands, their members, and appurtenances in the Pacific Ocean'. The area of the colony thus constituted was 554,300 square miles. By letters patent dated 13 March 1861, forwarded by the Colonial Secretary to the Governor of Queensland on 12 April 1862, the area of Queensland was increased by the annexation of 'so much of the colony of New South Wales as lies to the northward of the 26th parallel of south latitude, and between the 141st and 138th meridians of east longitude, together with all and every the adjacent islands, their members, and appurtenances, in the Gulf of Carpentaria'. With this addition the area of Queensland became 670,500 square miles. Following a thorough revision of the area of each local government area of Queensland, based on the most recent maps available, the Surveyor-General in 1958 determined the area of Queensland as 667,000 square miles—a reduction of 3,500 square miles from the area previously determined.

The establishment of the Commonwealth of Australia

Federation

On 1 January 1901 the colonies mentioned, with the exception of New Zealand, were federated under the name of the 'Commonwealth of Australia', the designation of 'Colonies'—except in the case of the Northern Territory, to which the designation 'Territory' applied—being at the same time changed to that of 'States'.

Transfer of the Northern Territory to the Commonwealth

On 7 December 1907 the Commonwealth and the State of South Australia entered into an agreement for the transfer of the Northern Territory to the Commonwealth, subject to approval by the Parliaments of the Commonwealth and the State. This approval was given by the South Australian Parliament under The Northern Territory Surrender Act, 1907 and by the Commonwealth Parliament under the *Northern Territory Acceptance Act* 1910. The Territory was formally transferred to the Commonwealth on 1 January 1911, and became the Northern Territory of Australia.

By Imperial Order in Council dated 23 July 1931 Ashmore Islands, known as Middle, East, and West Islands, and Cartier Island, situated in the Indian Ocean off the north-west coast of Australia, were placed under the authority of the Commonwealth. The islands were accepted by the Commonwealth on 10 May 1934, in the *Ashmore and Cartier Islands Acceptance Act* 1933, under the name of the Territory of Ashmore and Cartier Islands. The Act authorised the Governor of Western Australia to make ordinances having the force of law in and in relation to the Territory. An amendment to the Act in July 1938 annexed the islands to the Northern Territory, whose laws, ordinances, and regulations, wherever applicable, thereupon applied.

The area of Ashmore Reef is approximately 60 square miles (to the limit of the reef), and it is situated 220 statute miles off the western coast of Australia and 520 statute miles west of Darwin. Cartier Island is approximately 17 square miles in area (to the limit of the reef), and is situated 184 statute miles off the western coast of Australia and 490 statute miles west of Darwin.

Transfer of the Australian Capital Territory to the Commonwealth

On 18 October 1909 the Commonwealth and the State of New South Wales entered into an agreement for the surrender to and acceptance by the Commonwealth of an area of 911 square miles as the Seat of Government of the Commonwealth. In December 1909, Acts were passed by the Commonwealth and New South Wales Parliaments approving the agreement, and on 5 December 1910 a proclamation was issued vesting the Territory in the Commonwealth on and from 1 January 1911. By the *Jervis Bay Territory Acceptance Act* 1915 an area of 28 square miles at Jervis Bay, surrendered by New South Wales according to an agreement made in 1913, was accepted by the Commonwealth, and was transferred as from 4 September 1915.

Present composition of the Commonwealth

Following revision of the areas of Tasmania and Queensland as mentioned on pages 3 and 4, and of the area of the Northern Territory during 1964, the total area of the Commonwealth of Australia has been determined as 2,967,909 square miles. The years in which the respective areas were annexed, the years of first permanent settlement, and the years in which responsible government was granted to the Colonies, and the present areas of the several States and Territories and of the Commonwealth are shown below.

THE COMMONWEALTH OF AUSTRALIA: COMPONENT STATES AND TERRITORIES

State or Territory	*Year of annexation*	*Year of first permanent settlement*	*Year of formation into separate Colony or Territory*	*Year in which responsible government was granted*	*Present area in square miles*
New South Wales	1770	1788	1786	1855	309,433
Victoria	1770	1834	1851	1855	87,884
Queensland	1770	1824	1859	(*a*)1859	667,000
South Australia	1788	1836	1834	1856	380,070
Western Australia	1829	1829	1829	1890	975,920
Tasmania	1788	1803	1825	1855	26,383
Northern Territory	..	..	(*b*)1863	..	520,280
Australian Capital Territory	..	..	(*c*)1911	..	939
Commonwealth of Australia	..	..	..	(*d*)	**2,967,909**

(*a*) As a separate State—as part of New South Wales, in 1855. (*b*) Previously part of New South Wales—transferred to the Commonwealth in 1911—*see* page 4. (*c*) Previously part of New South Wales. (*d*) Constituted as from 1 January 1901.

The Constitution of the Commonwealth

Information regarding the development of the Constitutions of the various Colonies (now States), together with a brief history of the federal movement in Australia, was embodied in this chapter in issues of the Year Book up to and including No. 22.

Commonwealth Constitution Act

The Commonwealth of Australia Constitution Act, 63 and 64 Vict., Chapter 12, namely: 'An Act to constitute the Commonwealth of Australia', as amended by the *Constitution Alteration* (*Senate Elections*) 1906, the *Constitution Alteration* (*State Debts*) 1909, the *Constitution Alteration* (*State Debts*) 1928, the *Constitution Alteration* (*Social Services*) 1946, and the *Constitution Alteration* (*Aboriginals*) 1967, is given *in extenso* hereunder, and the text contains all the alterations of the Constitution which have been made up to and including 31 December 1968.

THE COMMONWEALTH OF AUSTRALIA CONSTITUTION ACT.

63 & 64 VICT., CHAPTER 12.

An Act to Constitute the Commonwealth of Australia. (*9th July, 1900.*)

WHEREAS the people of New South Wales, Victoria, South Australia, Queensland, and Tasmania, humbly relying on the blessing of Almighty God, have agreed to unite in one indissoluble Federal Commonwealth under the Crown of the United Kingdom of Great Britain and Ireland, and under the Constitution hereby established:

And whereas it is expedient to provide for the admission into the Commonwealth of other Australasian colonies and possessions of the Queen:

Be it therefore enacted by the Queen's Most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled and by the authority of the same, as follows:—

1. This Act may be cited as the Commonwealth of Australia Constitution Act.

2. The provisions of this Act referring to the Queen shall extend to Her Majesty's heirs and successors in the sovereignty of the United Kingdom.

3. It shall be lawful for the Queen, with the advice of the Privy Council, to declare by proclamation that, on and after a day therein appointed, not being later than one year after the passing of this Act, the people of New South Wales, Victoria, South Australia, Queensland, and Tasmania, and also, if Her Majesty is satisfied that the people of Western Australia have agreed thereto, of Western Australia, shall be united in a Federal Commonwealth under the name of the Commonwealth of Australia. But the Queen may, at any time after the proclamation, appoint a Governor-General for the Commonwealth.

4. The Commonwealth shall be established, and the Constitution of the Commonwealth shall take effect, on and after the day so appointed. But the Parliaments of the several colonies may at any time after the passing of this Act make any such laws, to come into operation on the day so appointed, as they might have made if the Constitution had taken effect at the passing of this Act.

5. This Act, and all laws made by the Parliament of the Commonwealth under the Constitution, shall be binding on the courts, judges, and people of every State and of every part of the Commonwealth, notwithstanding anything in the laws of any State: and the laws of the Commonwealth shall be in force on all British ships, the Queen's ships of war excepted, whose first port of clearance and whose port of destination are in the Commonwealth.

6. " The Commonwealth " shall mean the Commonwealth of Australia as established under this Act.

" The States " shall mean such of the colonies of New South Wales, New Zealand, Queensland, Tasmania, Victoria, Western Australia, and South Australia, including the northern territory of South Australia, as for the time being are parts of the Commonwealth, and such colonies or territories as may be admitted into or established by the Commonwealth as States; and each of such parts of the Commonwealth shall be called " a State."

" Original States " shall mean such States as are parts of the Commonwealth at its establishment.

7. The Federal Council of Australasia Act, 1885, is hereby repealed, but so as not to affect any laws passed by the Federal Council of Australasia and in force at the establishment of the Commonwealth.

Any such law may be repealed as to any State by the Parliament of the Commonwealth, or as to any colony not being a State by the Parliament thereof.

8. After the passing of this Act the Colonial Boundaries Act, 1895, shall not apply to any colony which becomes a State of the Commonwealth; but the Commonwealth shall be taken to be a self-governing colony for the purposes of that Act.

9. The Constitution of the Commonwealth shall be as follows:—

THE CONSTITUTION.

This Constitution is divided as follows:—

Chapter I.—The Parliament:
  Part I.—General:
  Part II.—The Senate:
  Part III.—The House of Representatives:
  Part IV.—Both Houses of the Parliament:
  Part V.—Powers of the Parliament:
Chapter II.—The Executive Government:
Chapter III.—The Judicature:
Chapter IV.—Finance and Trade:
Chapter V.—The States:
Chapter VI.—New States:
Chapter VII.—Miscellaneous:
Chapter VIII.—Alteration of the Constitution.
The Schedule.

CHAPTER I.—THE PARLIAMENT.

Part I.—General.

1. The legislative power of the Commonwealth shall be vested in a Federal Parliament, which shall consist of the Queen, a Senate, and a House of Representatives, and which is hereinafter called " The Parliament ", or " The Parliament of the Commonwealth ".

2. A Governor-General appointed by the Queen shall be Her Majesty's representative in the Commonwealth, and shall have and may exercise in the Commonwealth during the Queen's pleasure, but subject to this Constitution, such powers and functions of the Queen as Her Majesty may be pleased to assign to him.

3. There shall be payable to the Queen out of the Consolidated Revenue Fund of the Commonwealth, for the salary of the Governor-General, an annual sum which, until the Parliament otherwise provides, shall be ten thousand pounds.

The salary of a Governor-General shall not be altered during his continuance in office.

4. The provisions of this Constitution relating to the Governor-General extend and apply to the Governor-General for the time being, or such person as the Queen may appoint to administer the Government of the Commonwealth; but no such person shall be entitled to receive any salary from the Commonwealth in respect of any other office during his administration of the Government of the Commonwealth.

5. The Governor-General may appoint such times for holding the sessions of the Parliament as he thinks fit, and may also from time to time, by Proclamation or otherwise, prorogue the Parliament, and may in like manner dissolve the House of Representatives.

After any general election the Parliament shall be summoned to meet not later than thirty days after the day appointed for the return of the writs.

The Parliament shall be summoned to meet not later than six months after the establishment of the Commonwealth.

6. There shall be a session of the Parliament once at least in every year, so that twelve months shall not intervene between the last sitting of the Parliament in one session and its first sitting in the next session.

Part II.—The Senate.

7. The Senate shall be composed of senators for each State, directly chosen by the people of the State, voting, until the Parliament otherwise provides, as one electorate.

But until the Parliament of the Commonwealth otherwise provides, the Parliament of the State of Queensland, if that State be an Original State, may make laws dividing the State into divisions and determining the number of senators to be chosen for each division, and in the absence of such provision the State shall be one electorate.

Until the Parliament otherwise provides there shall be six senators for each Original State.* The Parliament may make laws increasing or diminishing the number of senators for each State, but so that equal representation of the several Original States shall be maintained and that no Original State shall have less than six senators.

The senators shall be chosen for a term of six years, and the names of the senators chosen for each State shall be certified by the Governor to the Governor-General.

8. The qualification of electors of senators shall be in each State that which is prescribed by this Constitution, or by the Parliament, as the qualification for electors of members of the House of Representatives; but in the choosing of senators each elector shall vote only once.

9. The Parliament of the Commonwealth may make laws prescribing the method of choosing senators, but so that the method shall be uniform for all the States. Subject to any such law, the Parliament of each State may make laws prescribing the method of choosing the senators for that State.

The Parliament of a State may make laws for determining the times and places of elections of senators for the State.

10. Until the Parliament otherwise provides, but subject to this Constitution, the laws in force in each State, for the time being, relating to elections for the more numerous House of the Parliament of the State shall, as nearly as practicable, apply to elections of senators for the State.

11. The Senate may proceed to the despatch of business, notwithstanding the failure of any State to provide for its representation in the Senate.

12. The Governor of any State may cause writs to be issued for elections of senators for the State. In case of the dissolution of the Senate the writs shall be issued within ten days from the proclamation of such dissolution.

13. As soon as may be after the Senate first meets, and after each first meeting of the Senate following a dissolution thereof, the Senate shall divide the senators chosen for each State into two classes, as nearly equal in number as practicable; and the places of the senators of the first class shall become vacant at the expiration of [the third year] *three years*,† and the places of those of the second class at the expiration of [the sixth year] *six years*,† from the beginning of their term of service; and afterwards the places of senators shall become vacant at the expiration of six years from the beginning of their term of service.

The election to fill vacant places shall be made [in the year at the expiration of which] *within one year before*† the places are to become vacant.

For the purposes of this section the term of service of a senator shall be taken to begin on the first day of [January] *July*† following the day of his election, except in the cases of the first election and of the election next after any dissolution of the Senate, when it shall be taken to begin on the first day of [January] *July*† preceding the day of his election.

14. Whenever the number of senators for a State is increased or diminished, the Parliament of the Commonwealth may make such provision for the vacating of the places of senators for the State as it deems necessary to maintain regularity in the rotation.

15. If the place of a senator becomes vacant before the expiration of his term of service, the Houses of Parliament of the State for which he was chosen shall, sitting and voting together, choose a person to hold the place until the expiration of the term, or until the election of a successor as hereinafter provided, whichever first happens. But if the Houses of Parliament of the State are not in session at the time when the vacancy is notified, the Governor of the State, with the advice of the Executive Council thereof, may appoint a person to hold the place until the expiration of fourteen days after the beginning of the next session of the Parliament of the State, or until the election of a successor, whichever first happens.

At the next general election of members of the House of Representatives, or at the next election of senators for the State, whichever first happens, a successor shall, if the term has not then expired, be chosen to hold the place from the date of his election until the expiration of the term.

The name of any senator so chosen or appointed shall be certified by the Governor of the State to the Governor-General.

16. The qualifications of a senator shall be the same as those of a member of the House of Representatives.

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* The Parliament has otherwise provided, by means of the *Representation Act* 1948, that the number of senators shall be ten for each State from the first meeting of Parliament after the first dissolution of the House of Representatives occurring after the commencement of the Act (18 May 1948).

† As amended by Section 2 of the *Constitution Alteration* (*Senate Elections*) 1906. The words in square brackets have been repealed; amendments are shown in italics.

17. The Senate shall, before proceeding to the despatch of any other business, choose a senator to be the President of the Senate; and as often as the office of President becomes vacant the Senate shall again choose a senator to be the President.

The President shall cease to hold his office if he ceases to be a senator. He may be removed from office by a vote of the Senate, or he may resign his office or his seat by writing addressed to the Governor-General.

18. Before or during any absence of the President, the Senate may choose a senator to perform his duties in his absence.

19. A senator may, by writing addressed to the President, or to the Governor-General if there is no President or if the President is absent from the Commonwealth, resign his place, which thereupon shall become vacant.

20. The place of a senator shall become vacant if for two consecutive months of any session of the Parliament he, without the permission of the Senate, fails to attend the Senate.

21. Whenever a vacancy happens in the Senate, the President, or if there is no President or if the President is absent from the Commonwealth the Governor-General, shall notify the same to the Governor of the State in the representation of which the vacancy has happened.

22. Until the Parliament otherwise provides, the presence of at least one third of the whole number of the senators shall be necessary to constitute a meeting of the Senate for the exercise of its powers.

23. Questions arising in the Senate shall be determined by a majority of votes, and each senator shall have one vote. The President shall in all cases be entitled to a vote; and when the votes are equal the question shall pass in the negative.

Part III.—The House of Representatives.

24. The House of Representatives shall be composed of members directly chosen by the people of the Commonwealth, and the number of such members shall be, as nearly as practicable, twice the number of the senators.

The number of members chosen in the several States shall be in proportion to the respective numbers of their people, and shall, until the Parliament otherwise provides, be determined, whenever necessary, in the following manner:—

(i) A quota shall be ascertained by dividing the number of the people of the Commonwealth, as shown by the latest statistics of the Commonwealth, by twice the number of the senators;

(ii) The number of members to be chosen in each State shall be determined by dividing the number of the people of the State, as shown by the latest statistics of the Commonwealth, by the quota; and if on such division there is a remainder greater than one-half of the quota, one more member shall be chosen in the State.

But notwithstanding anything in this section, five members at least shall be chosen in each Original State.

25. For the purposes of the last section, if by the law of any State all persons of any race are disqualified from voting at elections for the more numerous House of the Parliament of the State, then, in reckoning the number of the people of the State or of the Commonwealth, persons of that race resident in that State shall not be counted.

26. Notwithstanding anything in section twenty-four, the number of members to be chosen in each State at the first election shall be as follows:—

New South Wales	twenty-three;	South Australia	six;
Victoria	twenty;	Tasmania	five;
Queensland	eight;		

Provided that if Western Australia is an Original State, the numbers shall be as follows:—

New South Wales	twenty-six;	South Australia	seven;
Victoria	twenty-three;	Western Australia	five;
Queensland	nine;	Tasmania	five.

27. Subject to this Constitution, the Parliament may make laws for increasing or diminishing the number of the members of the House of Representatives.

28. Every House of Representatives shall continue for three years from the first meeting of the House, and no longer, but may be sooner dissolved by the Governor-General.

29. Until the Parliament of the Commonwealth otherwise provides, the Parliament of any State may make laws for determining the divisions in each State for which members of the House of Representatives may be chosen, and the number of members to be chosen for each division. A division shall not be formed out of parts of different States.

In the absence of other provision, each State shall be one electorate.

30. Until the Parliament otherwise provides, the qualification of electors of members of the House of Representatives shall be in each State that which is prescribed by the law of the State as the qualification of electors of the more numerous House of Parliament of the State; but in the choosing of members each elector shall vote only once.*

31. Until the Parliament otherwise provides, but subject to this Constitution, the laws in force in each State for the time being relating to elections for the more numerous House of the Parliament of the State shall, as nearly as practicable, apply to elections in the State of members of the House of Representatives.

32. The Governor-General in Council may cause writs to be issued for general elections of members of the House of Representatives.

After the first general election, the writs shall be issued within ten days from the expiry of a House of Representatives or from the proclamation of a dissolution thereof.

33. Whenever a vacancy happens in the House of Representatives, the Speaker shall issue his writ for the election of a new member, or if there is no Speaker or if he is absent from the Commonwealth the Governor-General in Council may issue the writ.

34. Until the Parliament otherwise provides, the qualifications of a member of the House of Representatives shall be as follows:—

(i) He must be of the full age of twenty-one years, and must be an elector entitled to vote at the election of members of the House of Representatives, or a person qualified to become such elector, and must have been for three years at the least a resident within the limits of the Commonwealth as existing at the time when he is chosen:

(ii) He must be a subject of the Queen, either natural-born or for at least five years naturalized under a law of the United Kingdom, or of a Colony which has become or becomes a State, or of the Commonwealth, or of a State.†

35. The House of Representatives shall, before proceeding to the despatch of any other business, choose a member to be the Speaker of the House, and as often as the office of Speaker becomes vacant the House shall again choose a member to be the Speaker.

The Speaker shall cease to hold his office if he ceases to be a member. He may be removed from office by a vote of the House, or he may resign his office or his seat by writing addressed to the Governor-General.

36. Before or during any absence of the Speaker, the House of Representatives may choose a member to perform his duties in his absence.

37. A member may by writing addressed to the Speaker, or to the Governor-General if there is no Speaker or if the Speaker is absent from the Commonwealth, resign his place, which thereupon shall become vacant.

38. The place of a member shall become vacant if for two consecutive months of any session of the Parliament he, without the permission of the House, fails to attend the House.

39. Until the Parliament otherwise provides, the presence of at least one-third of the whole number of the members of the House of Representatives shall be necessary to constitute a meeting of the House for the exercise of its powers.

40. Questions arising in the House of Representatives shall be determined by a majority of votes other than that of the Speaker. The Speaker shall not vote unless the numbers are equal, and then he shall have a casting vote.

PART IV.—BOTH HOUSES OF THE PARLIAMENT.

41. No adult person who has or acquires a right to vote at elections for the more numerous House of the Parliament of a State shall, while the right continues, be prevented by any law of the Commonwealth from voting at elections for either House of the Parliament of the Commonwealth.

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* The Parliament has otherwise provided, by means of the *Commonwealth Electoral Act* 1918–1965, Sections 39 and 39A (repealing an earlier provision made by the *Commonwealth Franchise Act* 1902). For present qualifications *see* Chapter 3, General Government.

† The Parliament has otherwise provided, by means of the *Commonwealth Electoral Act* 1918–1965, Section 69. For present qualifications *see* Chapter 3, General Government.

42. Every senator and every member of the House of Representatives shall before taking his seat make and subscribe before the Governor-General, or some person authorized by him, an oath or affirmation of allegiance in the form set forth in the schedule to this Constitution.

43. A member of either House of the Parliament shall be incapable of being chosen or of sitting as a member of the other House.

44. Any person who—

(i) Is under any acknowledgment of allegiance, obedience, or adherence to a foreign power, or is a subject or a citizen or entitled to the rights or privileges of a subject or a citizen of a foreign power: or

(ii) Is attainted of treason, or has been convicted and is under sentence, or subject to be sentenced, for any offence punishable under the law of the Commonwealth or of a State by imprisonment for one year or longer: or

(iii) Is an undischarged bankrupt or insolvent: or

(iv) Holds any office of profit under the Crown, or any pension payable during the pleasure of the Crown out of any of the revenues of the Commonwealth: or

(v) Has any direct or indirect pecuniary interest in any agreement with the Public Service of the Commonwealth otherwise than as a member and in common with the other members of an incorporated company consisting of more than twenty-five persons:

shall be incapable of being chosen or of sitting as a senator or a member of the House of Representatives.

But sub-section (iv) does not apply to the office of any of the Queen's Ministers of State for the Commonwealth, or of any of the Queen's Ministers for a State, or to the receipt of pay, half-pay, or a pension by any person as an officer or member of the Queen's navy or army, or to the receipt of pay as an officer or member of the naval or military forces of the Commonwealth by any person whose services are not wholly employed by the Commonwealth.

45. If a senator or member of the House of Representatives—

(i) Becomes subject to any of the disabilities mentioned in the last preceding section: or

(ii) Takes the benefit, whether by assignment, composition, or otherwise, of any law relating to bankrupt or insolvent debtors: or

(iii) Directly or indirectly takes or agrees to take any fee or honorarium for services rendered to the Commonwealth, or for services rendered in the Parliament to any person or State:

his place shall thereupon become vacant.

46. Until the Parliament otherwise provides, any person declared by this Constitution to be incapable of sitting as a senator or as a member of the House of Representatives shall, for every day on which he so sits, be liable to pay the sum of one hundred pounds to any person who sues for it in any court of competent jurisdiction.

47. Until the Parliament otherwise provides, any question respecting the qualification of a senator or of a member of the House of Representatives, or respecting a vacancy in either House of the Parliament, and any question of a disputed election to either House shall be determined by the House in which the question arises.

48. Until the Parliament otherwise provides, each senator and each member of the House of Representatives shall receive an allowance of four hundred pounds a year, to be reckoned from the day on which he takes his seat.*

49. The powers, privileges, and immunities of the Senate and of the House of Representatives, and of the members and the committees of each House, shall be such as are declared by the Parliament, and until declared shall be those of the Commons House of Parliament of the United Kingdom, and of its members and committees, at the establishment of the Commonwealth.

50. Each House of the Parliament may make rules and orders with respect to—

(i) The mode in which its powers, privileges, and immunities may be exercised and upheld;

(ii) The order and conduct of its business and proceedings either separately or jointly with the other House.

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* The Parliamentary allowance has been varied from time to time. For current allowances, *see* **Chapter 3, General Government.**

PART V.—POWERS OF THE PARLIAMENT.*

51. The Parliament shall, subject to this Constitution, have power to make laws for the peace, order, and good government of the Commonwealth with respect to:—

(i) Trade and commerce with other countries, and among the States:

(ii) Taxation; but so as not to discriminate between States or parts of States:

(iii) Bounties on the production or export of goods, but so that such bounties shall be uniform throughout the Commonwealth:

(iv) Borrowing money on the public credit of the Commonwealth:

(v) Postal, telegraphic, telephonic, and other like services:

(vi) The naval and military defence of the Commonwealth and of the several States, and the control of the forces to execute and maintain the laws of the Commonwealth:

(vii) Lighthouses, lightships, beacons and buoys:

(viii) Astronomical and meteorological observations:

(ix) Quarantine:

(x) Fisheries in Australian waters beyond territorial limits:

(xi) Census and statistics:

(xii) Currency, coinage, and legal tender:

(xiii) Banking, other than State banking; also State banking extending beyond the limits of the State concerned, the incorporation of banks, and the issue of paper money:

(xiv) Insurance, other than State insurance; also State insurance extending beyond the limits of the State concerned:

(xv) Weights and measures:

(xvi) Bills of exchange and promissory notes:

(xvii) Bankruptcy and insolvency:

(xviii) Copyrights, patents of inventions and designs, and trade marks:

(xix) Naturalization and aliens:

(xx) Foreign corporations, and trading or financial corporations formed within the limits of the Commonwealth:

(xxi) Marriage:

(xxii) Divorce and matrimonial causes; and in relation thereto, parental rights, and the custody and guardianship of infants:

(xxiii) Invalid and old-age pensions:

(xxiiiA) †*The provision of maternity allowances, widows' pensions, child endowment, unemployment, pharmaceutical, sickness and hospital benefits, medical and dental services (but not so as to authorize any form of civil conscription), benefits to students and family allowances:*

(xxiv) The service and execution throughout the Commonwealth of the civil and criminal process and the judgments of the courts of the States:

(xxv) The recognition throughout the Commonwealth of the laws, the public Acts and records, and the judicial proceedings of the States:

(xxvi) The people of any race [other than the aboriginal race in any State]‡ for whom it is deemed necessary to make special laws:

(xxvii) Immigration and emigration:

(xxviii) The influx of criminals:

(xxix) External affairs:

(xxx) The relations of the Commonwealth with the islands of the Pacific:

(xxxi) The acquisition of property on just terms from any State or person for any purpose in respect of which the Parliament has power to make laws:

(xxxii) The control of railways with respect to transport for the naval and military purposes of the Commonwealth:

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* Particulars of proposed laws which were submitted to referendums are referred to in Chapter 3, General Government, of this Year Book.

† Under Section 2 of the *Constitution Alteration (Social Services)* 1946, the Constitution was amended by the insertion of this paragraph.

‡ Under Section 2 of the *Constitution Alteration (Aboriginals)* 1967, the words in square brackets were omitted.

(xxxiii) The acquisition, with the consent of a State, of any railways of the State on terms arranged between the Commonwealth and the State:

(xxxiv) Railway construction and extension in any State with the consent of that State:

(xxxv) Conciliation and arbitration for the prevention and settlement of industrial disputes extending beyond the limits of any one State:

(xxxvi) Matters in respect of which this Constitution makes provision until the Parliament otherwise provides:

(xxxvii) Matters referred to the Parliament of the Commonwealth by the Parliament or Parliaments of any State or States, but so that the law shall extend only to States by whose Parliaments the matter is referred, or which afterwards adopt the law:

(xxxviii) The exercise within the Commonwealth, at the request or with the concurrence of the Parliaments of all the States directly concerned, of any power which can at the establishment of this Constitution be exercised only by the Parliament of the United Kingdom or by the Federal Council of Australasia:

(xxxix) Matters incidental to the execution of any power vested by this Constitution in the Parliament or in either House thereof, or in the Government of the Commonwealth, or in the Federal Judicature, or in any department or officer of the Commonwealth.

52. The Parliament shall, subject to this Constitution, have exclusive power to make laws for the peace, order, and good government of the Commonwealth with respect to—

(i) The seat of Government of the Commonwealth, and all places acquired by the Commonwealth for public purposes:

(ii) Matters relating to any department of the public service the control of which is by this Constitution transferred to the Executive Government of the Commonwealth:

(iii) Other matters declared by this Constitution to be within the exclusive power of the Parliament.

53. Proposed laws appropriating revenue or moneys, or imposing taxation, shall not originate in the Senate. But a proposed law shall not be taken to appropriate revenue or moneys, or to impose taxation, by reason only of its containing provisions for the imposition or appropriation of fines or other pecuniary penalties, or for the demand or payment or appropriation of fees for licences, or fees for services under the proposed law.

The Senate may not amend proposed laws imposing taxation, or proposed laws appropriating revenue or moneys for the ordinary annual services of the Government.

The Senate may not amend any proposed law so as to increase any proposed charge or burden on the people.

The Senate may at any stage return to the House of Representatives any proposed law which the Senate may not amend, requesting, by message, the omission or amendment of any items or provisions therein. And the House of Representatives may, if it thinks fit, make any of such omissions or amendments, with or without modifications.

Except as provided in this section, the Senate shall have equal power with the House of Representatives in respect of all proposed laws.

54. The proposed law which appropriates revenue or moneys for the ordinary annual services of the Government shall deal only with such appropriation.

55. Laws imposing taxation shall deal only with the imposition of taxation, and any provision therein dealing with any other matter shall be of no effect.

Laws imposing taxation, except laws imposing duties of customs or of excise, shall deal with one subject of taxation only; but laws imposing duties of customs shall deal with duties of customs only, and laws imposing duties of excise shall deal with duties of excise only.

56. A vote, resolution, or proposed law for the appropriation of revenue or moneys shall not be passed unless the purpose of the appropriation has in the same session been recommended by message of the Governor-General to the House in which the proposal originated.

57. If the House of Representatives passes any proposed law, and the Senate rejects or fails to pass it, or passes it with amendments to which the House of Representatives will not agree, and if after an interval of three months the House of Representatives, in the same or the next session, again passes the proposed law with or without any amendments which have been made, suggested, or agreed to by the Senate, and the Senate rejects or fails to pass it, or passes it with amendments to which the House of Representatives will not agree, the Governor-General may dissolve the Senate and the House of Representatives simultaneously. But such dissolution shall not take place within six months before the date of the expiry of the House of Representatives by effluxion of time.

If after such dissolution the House of Representatives again passes the proposed law, with or without any amendments which have been made, suggested, or agreed to by the Senate, and the Senate rejects or fails to pass it, or passes it with amendments to which the House of Representatives will not agree, the Governor-General may convene a joint sitting of the members of the Senate and of the House of Representatives.

The members present at the joint sitting may deliberate and shall vote together upon the proposed law as last proposed by the House of Representatives, and upon amendments, if any, which have been made therein by one House and not agreed to by the other, and any such amendments which are affirmed by an absolute majority of the total number of the members of the Senate and House of Representatives shall be taken to have been carried, and if the proposed law, with the amendments, if any, so carried is affirmed by an absolute majority of the total number of the members of the Senate and House of Representatives, it shall be taken to have been duly passed by both Houses of the Parliament, and shall be presented to the Governor-General for the Queen's assent.

58. When a proposed law passed by both Houses of the Parliament is presented to the Governor-General for the Queen's assent he shall declare, according to his discretion, but subject to this Constitution, that he assents in the Queen's name, or that he withholds assent, or that he reserves the law for the Queen's pleasure.

The Governor-General may return to the House in which it originated any proposed law so presented to him, and may transmit therewith any amendments which he may recommend, and the Houses may deal with the recommendation.

59. The Queen may disallow any law within one year from the Governor-General's assent, and such disallowance on being made known by the Governor-General by speech or message to each of the Houses of the Parliament, or by Proclamation, shall annul the law from the day when the disallowance is so made known.

60. A proposed law reserved for the Queen's pleasure shall not have any force unless and until within two years from the day on which it was presented to the Governor-General for the Queen's assent the Governor-General makes known, by speech or message to each of the Houses of the Parliament, or by Proclamation, that it has received the Queen's assent.

CHAPTER II.—THE EXECUTIVE GOVERNMENT.

61. The executive power of the Commonwealth is vested in the Queen and is exercisable by the Governor-General as the Queen's representative, and extends to the execution and maintenance of this Constitution, and of the laws of the Commonwealth.

62. There shall be a Federal Executive Council to advise the Governor-General in the government of the Commonwealth, and the members of the Council shall be chosen and summoned by the Governor-General and sworn as Executive Councillors, and shall hold office during his pleasure.

63. The provisions of this Constitution referring to the Governor-General in Council shall be construed as referring to the Governor-General acting with the advice of the Federal Executive Council.

64. The Governor-General may appoint officers to administer such departments of State of the Commonwealth as the Governor-General in Council may establish.

Such officers shall hold office during the pleasure of the Governor-General. They shall be members of the Federal Executive Council, and shall be the Queen's Ministers of State for the Commonwealth.

After the first general election no Minister of State shall hold office for a longer period than three months unless he is or becomes a senator or a member of the House of Representatives.

65. Until the Parliament otherwise provides, the Ministers of State shall not exceed seven in number, and shall hold such offices as the Parliament prescribes, or, in the absence of provision, as the Governor-General directs.*

66. There shall be payable to the Queen, out of the Consolidated Revenue Fund of the Commonwealth, for the salaries of the Ministers of State, an annual sum which, until the Parliament otherwise provides, shall not exceed twelve thousand pounds a year.*

67. Until the Parliament otherwise provides, the appointment and removal of all other officers of the Executive Government of the Commonwealth shall be vested in the Governor-General in Council, unless the appointment is delegated by the Governor-General in Council or by a law of the Commonwealth to some other authority.

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* The number of Ministers of State and the annual appropriation for their salaries have been varied from time to time. For current particulars, *see* Chapter 3, General Government.

68. The command in chief of the naval and military forces of the Commonwealth is vested in the Governor-General as the Queen's representative.

69. On a date or dates to be proclaimed by the Governor-General after the establishment of the Commonwealth the following departments of the public service in each State shall become transferred to the Commonwealth:—

Posts, telegraphs, and telephones:
Naval and military defence:
Lighthouses, lightships, beacons, and buoys:
Quarantine.

But the departments of customs and of excise in each State shall become transferred to the Commonwealth on its establishment.

70. In respect of matters which, under this Constitution, pass to the Executive Government of the Commonwealth, all powers and functions which at the establishment of the Commonwealth are vested in the Governor of a Colony, or in the Governor of a Colony with the advice of his Executive Council, or in any authority of a Colony, shall vest in the Governor-General, or in the Governor-General in Council, or in the authority exercising similar powers under the Commonwealth, as the case requires.

CHAPTER III.—THE JUDICATURE.

71. The judicial power of the Commonwealth shall be vested in a Federal Supreme Court, to be called the High Court of Australia, and in such other federal courts as the Parliament creates, and in such other courts as it invests with federal jurisdiction. The High Court shall consist of a Chief Justice, and so many other Justices, not less than two, as the Parliament prescribes.[*]

72. The Justices of the High Court and of the other Courts created by the Parliament—

(i) Shall be appointed by the Governor-General in Council:
(ii) Shall not be removed except by the Governor-General in Council, on an address from both Houses of the Parliament in the same session, praying for such removal on the ground of proved misbehaviour or incapacity:
(iii) Shall receive such remuneration as the Parliament may fix; but the remuneration shall not be diminished during their continuance in office.[†]

73. The High Court shall have jurisdiction, with such exceptions and subject to such regulations as the Parliament prescribes, to hear and determine appeals from all judgments, decrees, orders, and sentences—

(i) Of any Justice or Justices exercising the original jurisdiction of the High Court:
(ii) Of any other federal court, or court exercising federal jurisdiction; or of the Supreme Court of any State, or of any other court of any State from which at the establishment of the Commonwealth an appeal lies to the Queen in Council:
(iii) Of the Inter-State Commission, but as to questions of law only:

and the judgment of the High Court in all such cases shall be final and conclusive.

But no exception or regulation prescribed by the Parliament shall prevent the High Court from hearing and determining any appeal from the Supreme Court of a State in any matter in which at the establishment of the Commonwealth an appeal lies from such Supreme Court to the Queen in Council.

Until the Parliament otherwise provides, the conditions of and restrictions on appeals to the Queen in Council from the Supreme Courts of the several States shall be applicable to appeals from them to the High Court.

74. No appeal shall be permitted to the Queen in Council from a decision of the High Court upon any question, howsoever arising, as to the limits inter se of the Constitutional powers of the Commonwealth and those of any State or States, or as to the limits inter se of the Constitutional powers of any two or more States, unless the High Court shall certify that the question is one which ought to be determined by Her Majesty in Council.

The High Court may so certify if satisfied that for any special reason the certificate should be granted, and thereupon an appeal shall lie to Her Majesty in Council on the question without further leave.

Except as provided in this section, this Constitution shall not impair any right which the Queen may be pleased to exercise by virtue of Her Royal prerogative to grant special leave of appeal from the High Court to Her Majesty in Council. The Parliament may make laws limiting the matters in which such leave may be asked, but proposed laws containing any such limitation shall be reserved by the Governor-General for Her Majesty's pleasure.

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[*] The *Judiciary Act* 1903 provided for a Chief Justice and two other Justices, increased by subsequent amendments to six.

[†] The *Judiciary Act* 1903 provided for the payment of a salary of £3,500 ($7,000) a year to the Chief Justice and of £3,000 ($6,000) a year to each other Justice. These amounts have been varied from time to time. For current salaries, *see* Chapter 16, Public Justice.

75. In all matters—
- (i) Arising under any treaty:
- (ii) Affecting consuls or other representatives of other countries:
- (iii) In which the Commonwealth, or a person suing or being sued on behalf of the Commonwealth, is a party:
- (iv) Between States, or between residents of different States, or between a State and a resident of another State:
- (v) In which a writ of Mandamus or prohibition or an injunction is sought against an officer of the Commonwealth:

the High Court shall have original jurisdiction.

76. The Parliament may make laws conferring original jurisdiction on the High Court in any matter—
- (i) Arising under this Constitution, or involving its interpretation:
- (ii) Arising under any laws made by the Parliament:
- (iii) Of Admiralty and maritime jurisdiction:
- (iv) Relating to the same subject-matter claimed under the laws of different States.

77. With respect to any of the matters mentioned in the last two sections the Parliament may make laws—
- (i) Defining the jurisdiction of any federal court other than the High Court:
- (ii) Defining the extent to which the jurisdiction of any federal court shall be exclusive of that which belongs to or is invested in the courts of the States:
- (iii) Investing any court of a State with federal jurisdiction.

78. The Parliament may make laws conferring rights to proceed against the Commonwealth or a State in respect of matters within the limits of the judicial power.

79. The federal jurisdiction of any court may be exercised by such number of judges as the Parliament prescribes.

80. The trial on indictment of any offence against any law of the Commonwealth shall be by jury, and every such trial shall be held in the State where the offence was committed, and if the offence was not committed within any State the trial shall be held at such place or places as the Parliament prescribes.

CHAPTER IV.—FINANCE AND TRADE.

81. All revenues or moneys raised or received by the Executive Government of the Commonwealth shall form one Consolidated Revenue Fund, to be appropriated for the purposes of the Commonwealth in the manner and subject to the charges and liabilities imposed by this Constitution.

82. The costs, charges, and expenses incident to the collection, management, and receipt of the Consolidated Revenue Fund shall form the first charge thereon; and the revenue of the Commonwealth shall in the first instance be applied to the payment of the expenditure of the Commonwealth.

83. No money shall be drawn from the Treasury of the Commonwealth except under appropriation made by law.

But until the expiration of one month after the first meeting of the Parliament the Governor-General in Council may draw from the Treasury and expend such moneys as may be necessary for the maintenance of any department transferred to the Commonwealth and for the holding of the first elections for the Parliament.

84. When any department of the public service of a State becomes transferred to the Commonwealth, all officers of the department shall become subject to the control of the Executive Government of the Commonwealth.

Any such officer who is not retained in the service of the Commonwealth shall, unless he is appointed to some other office of equal emolument in the public service of the State, be entitled to receive from the State any pension, gratuity, or other compensation, payable under the law of the State on the abolition of his office.

Any such officer who is retained in the service of the Commonwealth shall preserve all his existing and accruing rights, and shall be entitled to retire from office at the time, and on the pension or retiring allowance, which would be permitted by the law of the State if his service with the Commonwealth were a continuation of his service with the State. Such pension or retiring allowance shall be paid to him by the Commonwealth; but the State shall pay to the Commonwealth a part thereof to be calculated on the proportion which his term of service with the State bears to his whole term of service, and for the purpose of the calculation his salary shall be taken to be that paid to him by the State at the time of the transfer.

Any officer who is, at the establishment of the Commonwealth, in the public service of a State, and who is, by consent of the Governor of the State with the advice of the Executive Council thereof, transferred to the public service of the Commonwealth, shall have the same rights as if he had been an officer of a department transferred to the Commonwealth and were retained in the service of the Commonwealth.

85. When any department of the public service of a State is transferred to the Commonwealth—

(i) All property of the State of any kind, used exclusively in connexion with the department, shall become vested in the Commonwealth; but, in the case of the departments controlling customs and excise and bounties, for such time only as the Governor-General in Council may declare to be necessary:

(ii) The Commonwealth may acquire any property of the State, of any kind used, but not exclusively used in connexion with the department; the value thereof shall, if no agreement can be made, be ascertained in, as nearly as may be, the manner in which the value of land, or of an interest in land, taken by the State for public purposes is ascertained under the law of the State in force at the establishment of the Commonwealth:

(iii) The Commonwealth shall compensate the State for the value of any property passing to the Commonwealth under this section; if no agreement can be made as to the mode of compensation, it shall be determined under laws to be made by the Parliament:

(iv) The Commonwealth shall, at the date of the transfer, assume the current obligations of the State in respect of the department transferred.

86. On the establishment of the Commonwealth, the collection and control of duties of customs and of excise, and the control of the payment of bounties, shall pass to the Executive Government of the Commonwealth.

87. During a period of ten years after the establishment of the Commonwealth and thereafter until the Parliament otherwise provides, of the net revenue of the Commonwealth from duties of customs and of excise not more than one-fourth shall be applied annually by the Commonwealth towards its expenditure.

The balance shall, in accordance with this Constitution, be paid to the several States, or applied towards the payment of interest on debts of the several States taken over by the Commonwealth.

88. Uniform duties of customs shall be imposed within two years after the establishment of the Commonwealth.

89. Until the imposition of uniform duties of customs—

(i) The Commonwealth shall credit to each State the revenues collected therein by the Commonwealth.

(ii) The Commonwealth shall debit to each State—

  (*a*) The expenditure therein of the Commonwealth incurred solely for the maintenance or continuance, as at the time of transfer, of any department transferred from the State to the Commonwealth;

  (*b*) The proportion of the State, according to the number of its people, in the other expenditure of the Commonwealth.

(iii) The Commonwealth shall pay to each State month by month the balance (if any) in favour of the State.

90. On the imposition of uniform duties of customs the power of the Parliament to impose duties of customs and of excise, and to grant bounties on the production or export of goods, shall become exclusive.

On the imposition of uniform duties of customs all laws of the several States imposing duties of customs or of excise, or offering bounties on the production or export of goods, shall cease to have effect, but any grant of or agreement for any such bounty lawfully made by or under the authority of the Government of any State shall be taken to be good if made before the thirtieth day of June, one thousand eight hundred and ninety-eight, and not otherwise.

91. Nothing in this Constitution prohibits a State from granting any aid to or bounty on mining for gold, silver, or other metals, nor from granting, with the consent of both Houses of the Parliament of the Commonwealth expressed by resolution, any aid to or bounty on the production or export of goods.

92. On the imposition of uniform duties of customs, trade, commerce, and intercourse among the States, whether by means of internal carriage or ocean navigation, shall be absolutely free.

But notwithstanding anything in this Constitution, goods imported before the imposition of uniform duties of customs into any State, or into any Colony which, whilst the goods remain therein, becomes a State, shall, on thence passing into another State within two years after the imposition of such duties, be liable to any duty chargeable on the importation of such goods into the Commonwealth, less any duty paid in respect of the goods on their importation.

93. During the first five years after the imposition of uniform duties of customs, and thereafter until the Parliament otherwise provides—

(i) The duties of customs chargeable on goods imported into a State and afterwards passing into another State for consumption, and the duties of excise paid on goods produced or manufactured in a State and afterwards passing into another State for consumption, shall be taken to have been collected not in the former but in the latter State:

(ii) Subject to the last sub-section, the Commonwealth shall credit revenue, debit expenditure, and pay balances to the several States as prescribed for the period preceding the imposition of uniform duties of customs.

94. After five years from the imposition of uniform duties of customs, the Parliament may provide, on such basis as it deems fair, for the monthly payment to the several States of all surplus revenue of the Commonwealth.

95. Notwithstanding anything in this Constitution, the Parliament of the State of Western Australia, if that State be an Original State, may, during the first five years after the imposition of uniform duties of customs, impose duties of customs on goods passing into that State and not originally imported from beyond the limits of the Commonwealth; and such duties shall be collected by the Commonwealth.

But any duty so imposed on any goods shall not exceed during the first of such years the duty chargeable on the goods under the law of Western Australia in force at the imposition of uniform duties, and shall not exceed during the second, third, fourth, and fifth of such years respectively, four-fifths, three-fifths, two-fifths and one-fifth of such latter duty, and all duties imposed under this section shall cease at the expiration of the fifth year after the imposition of uniform duties.

If at any time during the five years the duty on any goods under this section is higher than the duty imposed by the Commonwealth on the importation of the like goods, then such higher duty shall be collected on the goods when imported into Western Australia from beyond the limits of the Commonwealth.

96. During a period of ten years after the establishment of the Commonwealth and thereafter until the Parliament otherwise provides, the Parliament may grant financial assistance to any State on such terms and conditions as the Parliament thinks fit.

97. Until the Parliament otherwise provides, the laws in force in any Colony which has become or becomes a State with respect to the receipt of revenue and the expenditure of money on account of the Government of the Colony, and the review and audit of such receipt and expenditure, shall apply to the receipt of revenue and the expenditure of money on account of the Commonwealth in the State in the same manner as if the Commonwealth, or the Government or an officer of the Commonwealth, were mentioned whenever the Colony, or the Government or an officer of the Colony, is mentioned.

98. The power of the Parliament to make laws with respect to trade and commerce extends to navigation and shipping, and to railways the property of any State.

99. The Commonwealth shall not, by any law or regulation of trade, commerce, or revenue, give preference to one State or any part thereof over another State or any part thereof.

100. The Commonwealth shall not, by any law or regulation of trade or commerce, abridge the right of a State or of the residents therein to the reasonable use of the waters of rivers for conservation or irrigation.

101. There shall be an Inter-State Commission, with such powers of adjudication and administration as the Parliament deems necessary for the execution and maintenance, within the Commonwealth, of the provisions of this Constitution relating to trade and commerce, and of all laws made thereunder.

102. The Parliament may by any law with respect to trade or commerce forbid, as to railways, any preference or discrimination by any State, or by any authority constituted under a State, if such preference or discrimination is undue and unreasonable, or unjust to any State; due regard

being had to the financial responsibilities incurred by any State in connexion with the construction and maintenance of its railways. But no preference or discrimination shall, within the meaning of this section, be taken to be undue and unreasonable, or unjust to any State, unless so adjudged by the Inter-State Commission.

103. The members of the Inter-State Commission—

(i) Shall be appointed by the Governor-General in Council:

(ii) Shall hold office for seven years, but may be removed within that time by the Governor-General in Council, on an address from both Houses of the Parliament in the same session praying for such removal on the ground of proved misbehaviour or incapacity:

(iii) Shall receive such remuneration as the Parliament may fix; but such remuneration shall not be diminished during their continuance in office.

104. Nothing in this Constitution shall render unlawful any rate for the carriage of goods upon a railway, the property of a State, if the rate is deemed by the Inter-State Commission to be necessary for the development of the territory of the State, and if the rate applies equally to goods within the State and to goods passing into the State from other States.

105. The Parliament may take over from the States their public debts [as existing at the establishment of the Commonwealth],* or a proportion thereof according to the respective numbers of their people as shown by the latest statistics of the Commonwealth, and may convert, renew, or consolidate such debts, or any part thereof; and the States shall indemnify the Commonwealth in respect of the debts taken over, and thereafter the interest payable in respect of the debts shall be deducted and retained from the portions of the surplus revenue of the Commonwealth payable to the several States, or if such surplus is insufficient, or if there is no surplus, then the deficiency or the whole amount shall be paid by the several States.

105A.† (1.) *The Commonwealth may make agreements with the States with respect to the public debts of the States, including—*

(*a*) *the taking over of such debts by the Commonwealth;*

(*b*) *the management of such debts;*

(*c*) *the payment of interest and the provision and management of sinking funds in respect of such debts;*

(*d*) *the consolidation, renewal, conversion, and redemption of such debts;*

(*e*) *the indemnification of the Commonwealth by the States in respect of debts taken over by the Commonwealth; and*

(*f*) *the borrowing of money by the States or by the Commonwealth, or by the Commonwealth for the States.*

(2.) *The Parliament may make laws for validating any such agreement made before the commencement of this section.*

(3.) *The Parliament may make laws for the carrying out by the parties thereto of any such agreement.*

(4.) *Any such agreement may be varied or rescinded by the parties thereto.*

(5.) *Every such agreement and any such variation thereof shall be binding upon the Commonwealth and the States parties thereto notwithstanding anything contained in this Constitution or the Constitution of the several States or in any law of the Parliament of the Commonwealth or of any State.*

(6.) *The powers conferred by this section shall not be construed as being limited in any way by the provisions of section one hundred and five of this Constitution.*

CHAPTER V.—THE STATES.

106. The Constitution of each State of the Commonwealth shall, subject to this Constitution, continue as at the establishment of the Commonwealth, or as at the admission or establishment of the State, as the case may be, until altered in accordance with the Constitution of the State.

107. Every power of the Parliament of a Colony which has become or becomes a State, shall, unless it is by this Constitution exclusively vested in the Parliament of the Commonwealth or withdrawn from the Parliament of the State, continue as at the establishment of the Commonwealth, or as at the admission or establishment of the State, as the case may be.

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* Under Section 2 of the *Constitution Alteration (State Debts)* 1909, the words in square brackets were omitted.

† Under Section 2 of the *Constitution Alteration (State Debts)* 1928, the Constitution was amended by the insertion of this section.

108. Every law in force in a Colony which has become or becomes a State, and relating to any matter within the powers of the Parliament of the Commonwealth, shall, subject to this Constitution, continue in force in the State; and, until provision is made in that behalf by the Parliament of the Commonwealth, the Parliament of the State shall have such powers of alteration and of repeal in respect of any such law as the Parliament of the Colony had until the Colony became a State.

109. When a law of a State is inconsistent with a law of the Commonwealth, the latter shall prevail, and the former shall, to the extent of the inconsistency, be invalid.

110. The provisions of this Constitution relating to the Governor of a State extend and apply to the Governor for the time being of the State, or other chief executive officer or administrator of the government of the State.

111. The Parliament of a State may surrender any part of the State to the Commonwealth; and upon such surrender, and the acceptance thereof by the Commonwealth, such part of the State shall become subject to the exclusive jurisdiction of the Commonwealth.

112. After uniform duties of customs have been imposed, a State may levy on imports or exports, or on goods passing into or out of the State, such charges as may be necessary for executing the inspection laws of the State; but the net produce of all charges so levied shall be for the use of the Commonwealth; and any such inspection laws may be annulled by the Parliament of the Commonwealth.

113. All fermented, distilled, or other intoxicating liquids passing into any State or remaining therein for use, consumption, sale or storage, shall be subject to the laws of the State as if such liquids had been produced in the State.

114. A State shall not, without the consent of the Parliament of the Commonwealth, raise or maintain any naval or military force, or impose any tax on property of any kind belonging to the Commonwealth, nor shall the Commonwealth impose any tax on property of any kind belonging to a State.

115. A State shall not coin money, nor make anything but gold and silver coin a legal tender in payment of debts.

116. The Commonwealth shall not make any law for establishing any religion, or for imposing any religious observance, or for prohibiting the free exercise of any religion, and no religious test shall be required as a qualification for any office or public trust under the Commonwealth.

117. A subject of the Queen, resident in any State, shall not be subject in any other State to any disability or discrimination which would not be equally applicable to him if he were a subject of the Queen resident in such other State.

118. Full faith and credit shall be given, throughout the Commonwealth, to the laws, the public Acts and records, and the judicial proceedings of every State.

119. The Commonwealth shall protect every State against invasion and, on the application of the Executive Government of the State, against domestic violence.

120. Every State shall make provision for the detention in its prisons of persons accused or convicted of offences against the laws of the Commonwealth, and for the punishment of persons convicted of such offences, and the Parliament of the Commonwealth may make laws to give effect to this provision.

CHAPTER VI.—NEW STATES.

121. The Parliament may admit to the Commonwealth or establish new States, and may upon such admission or establishment make or impose such terms and conditions, including the extent of representation in either House of the Parliament, as it thinks fit.

122. The Parliament may make laws for the government of any territory surrendered by any State to and accepted by the Commonwealth, or of any territory placed by the Queen under the authority of and accepted by the Commonwealth, or otherwise acquired by the Commonwealth, and may allow the representation of such territory in either House of the Parliament to the extent and on the terms which it thinks fit.

123. The Parliament of the Commonwealth may, with the consent of the Parliament of a State, and the approval of the majority of the electors of the State voting upon the question, increase, diminish, or otherwise alter the limits of the State, upon such terms and conditions as may be agreed on, and may, with the like consent, make provision respecting the effect and operation of any increase or diminution or alteration of territory in relation to any State affected.

124. A new State may be formed by separation of territory from a State, but only with the consent of the Parliament thereof, and a new State may be formed by the union of two or more States or parts of States, but only with the consent of the Parliaments of the States affected.

CHAPTER VII.—MISCELLANEOUS.

125. The seat of Government of the Commonwealth shall be determined by the Parliament and shall be within territory which shall have been granted to or acquired by the Commonwealth, and shall be vested in and belong to the Commonwealth, and shall be in the State of New South Wales, and be distant not less than one hundred miles from Sydney.

Such territory shall contain an area of not less than one hundred square miles, and such portion thereof as shall consist of Crown lands shall be granted to the Commonwealth without any payment therefor.

The Parliament shall sit at Melbourne until it meet at the Seat of Government.

126. The Queen may authorize the Governor-General to appoint any person, or any persons jointly or severally, to be his deputy or deputies within any part of the Commonwealth, and in that capacity to exercise during the pleasure of the Governor-General such powers and functions of the Governor-General as he thinks fit to assign to such deputy or deputies, subject to any limitations expressed or directions given by the Queen; but the appointment of such deputy or deputies shall not affect the exercise by the Governor-General himself of any power or function.

*[127. In reckoning the numbers of the people of the Commonwealth, or of a State or other part of the Commonwealth, aboriginal natives shall not be counted.]

CHAPTER VIII.—ALTERATION OF THE CONSTITUTION.

128. This Constitution shall not be altered except in the following manner:—

The proposed law for the alteration thereof must be passed by an absolute majority of each House of the Parliament, and not less than two nor more than six months after its passage through both Houses the proposed law shall be submitted in each State to the electors qualified to vote for the election of members of the House of Representatives.

But if either House passes any such proposed law by an absolute majority, and the other House rejects or fails to pass it or passes it with any amendment to which the first-mentioned House will not agree, and if after an interval of three months the first-mentioned House in the same or the next session again passes the proposed law by an absolute majority with or without any amendment which has been made or agreed to by the other House, and such other House rejects or fails to pass it or passes it with any amendment to which the first-mentioned House will not agree, the Governor-General may submit the proposed law as last proposed by the first-mentioned House, and either with or without any amendments subsequently agreed to by both Houses, to the electors in each State qualified to vote for the election of the House of Representatives.

When a proposed law is submitted to the electors the vote shall be taken in such manner as the Parliament prescribes. But until the qualification of electors of members of the House of Representatives becomes uniform throughout the Commonwealth, only one-half the electors voting for and against the proposed law shall be counted in any State in which adult suffrage prevails.

And if in a majority of the States a majority of the electors voting approve the proposed law, and if a majority of all the electors voting also approve the proposed law, it shall be presented to the Governor-General for the Queen's assent.

No alteration diminishing the proportionate representation of any State in either House of the Parliament, or the minimum number of representatives of a State in the House of Representatives, or increasing, diminishing, or otherwise altering the limits of the State, or in any manner affecting the provisions of the Constitution in relation thereto, shall become law unless the majority of the electors voting in that State approve the proposed law.

SCHEDULE.

OATH.

I, *A.B.*, do swear that I will be faithful and bear true allegiance to Her Majesty Queen Victoria, Her heirs and successors according to law. SO HELP ME GOD!

AFFIRMATION.

I, *A.B.*, do solemnly and sincerely affirm and declare that I will be faithful and bear true allegiance to Her Majesty Queen Victoria, Her heirs and successors according to law.

(NOTE.—*The name of the King or Queen of the United Kingdom of Great Britain and Ireland for the time being is to be substituted from time to time.*)

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* Under Section 3 of the *Constitution Alteration (Aboriginals)* 1967 the section in square brackets was repealed.

The Royal Proclamation

The preceding Act received the Royal assent on 9 July 1900. This made it lawful to declare that the people of Australia should be united in a Federal Commonwealth. This proclamation, made on 17 September 1900, constituted the Commonwealth as from 1 January 1901; it read as follows.

BY THE QUEEN.

A PROCLAMATION.

(Signed) VICTORIA R.

> WHEREAS by an Act of Parliament passed in the Sixty-third and Sixty-fourth Years of Our Reign, intituled " An Act to constitute the Commonwealth of *Australia*," it is enacted that it shall be lawful for the Queen, with the advice of the Privy Council, to declare by Proclamation, that, on and after a day therein appointed, not being later than One year after the passing of this Act, the people of *New South Wales*, *Victoria*, *South Australia*, *Queensland*, and *Tasmania*, and also, if Her Majesty is satisfied that the people of *Western Australia* have agreed thereto, of *Western Australia*, shall be united in a Federal Commonwealth under the name of the Commonwealth of Australia.
>
> And whereas We are satisfied that the people of *Western Australia* have agreed thereto accordingly.
>
> We therefore, by and with the advice of Our Privy Council, have thought fit to issue this Our Royal Proclamation, and We do hereby declare that on and after the First day of *January* One thousand nine hundred and one, the people of *New South Wales*, *Victoria*, *South Australia*, *Queensland*, *Tasmania*, and *Western Australia* shall be united in a Federal Commonwealth under the name of the Commonwealth of *Australia*.
>
> Given at Our Court at *Balmoral* this Seventeenth day of *September*, in the Year of Our Lord One thousand nine hundred, and in the Sixty-fourth Year of Our Reign.
>
> GOD SAVE THE QUEEN.

The External Territories of Australia*

Norfolk Island

In 1856 Norfolk Island was created a distinct and separate settlement under the jurisdiction of New South Wales. Later, in 1896, it was made a dependency under the Governor of that colony, and finally by the passage of the *Norfolk Island Act* 1913 it was accepted as a Territory of the Commonwealth of Australia. The island is situated in latitude 29° 3′ 3″ S., longitude 167° 57′ 5″ E., and comprises an area of approximately 14 square miles.

Papua

Under the administration of the Commonwealth, but not included in it, is British New Guinea or Papua, finally annexed by the British Government in 1884. This Territory was for a number of years administered by the Queensland Government, but was transferred to the Commonwealth by proclamation on 1 September 1906, under the authority of the *Papua Act* 1905. The area of Papua is about 86,100 square miles.

Trust Territory of New Guinea

In 1919 it was agreed by the Principal Allied and Associated Powers that a mandate should be conferred on Australia for the government of the former German territories and islands situated in latitude between the Equator and 8° S., and in longitude between 141° E. and 159° 25′ E. The mandate was issued by the League of Nations on 17 December 1920. The Governor-General of the Commonwealth was authorised to accept the mandate by the *New Guinea Act* 1920, which also declared the area to be a Territory under the authority of the Commonwealth by the name of the Territory of New Guinea. The land area comprises about 92,160 square miles, and the administration under the mandate dated from 9 May 1921. New Guinea is now administered under a Trusteeship Agreement with the United Nations, approved on 13 December 1946.

Australian Antarctic Territory

An Imperial Order in Council of 7 February 1933 placed under Australian authority 'all the islands and territories other than Adelie Land which are situated south of the 60th degree of South Latitude and lying between the 160th degree of East Longitude and the 45th degree of East Longitude'.

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* Until 31 January 1968 included the former Trust Territory of Nauru, which became independent as the Republic of Nauru on that date. For further information on Nauru *see* Year Book No. 54, pages 22–3 and 1174, and earlier issues.

The Order came into force with a proclamation issued by the Governor-General on 24 August 1936, after the passing of the *Australian Antarctic Territory Acceptance Act* 1933 by the Commonwealth Parliament. The boundaries of Adelie Land were definitely fixed by a French Decree of 1 April 1938 as latitude 60° S., longitude 136° E., and longitude 142° E.

Heard and McDonald Islands

Heard and McDonald Islands, about 2,500 miles south-west of Fremantle, were transferred from United Kingdom to Australian control as from 26 December 1947. Heard Island is approximately 27 miles long and 13 miles wide, and McDonald Islands, about 26 miles to the west of Heard Island, are small, rocky and precipitous.

Cocos (Keeling) Islands

The Cocos (*Keeling*) *Islands Act* 1955 provided for the acceptance of the Cocos Islands, in the Indian Ocean, as a Territory under the authority of the Commonwealth of Australia and was parallel to an Act of the United Kingdom Parliament transferring authority over the islands to the Commonwealth. Consequent on the passing of these Acts, Her Majesty, by Order in Council, specified 23 November 1955 as the date of transfer. From that date the islands came under Australian administration and an Official Representative of Australia was appointed to take charge of the local administration of the islands. Their approximate area is about 5½ square miles, and they are situated in the Indian Ocean in latitude 12° 5′ S. and longitude 96° 53′ E.

Christmas Island

The *Christmas Island Act* 1958 provided for the acceptance of Christmas Island, in the Indian Ocean, as a Territory under the authority of the Commonwealth of Australia. Complementary legislation having been passed by the Parliament of the United Kingdom, the island was transferred to the Australian administration on 1 October 1958, and an Official Representative was appointed to administer the Territory. The area of the island is about 52 square miles and it is situated in the Indian Ocean in latitude 10° 25′ 22″ S. and longitude 105° 39′ 59″ E.

CHAPTER 2

PHYSICAL GEOGRAPHY AND CLIMATE

General description of Australia

Geographical position

The Australian Commonwealth, which includes the island continent of Australia and the island of Tasmania, is situated in the Southern Hemisphere, and comprises an area of 2,967,909 square miles, the mainland alone containing 2,941,526 square miles. Bounded on the west and east by the Indian and Pacific Oceans respectively, it lies between longitudes 113° 9′ E. and 153° 39′ E., while its northern and southern limits are the parallels of latitude 10° 41′ S. and 43° 39′ S., or, excluding Tasmania, 39° 8′ S. On its north are the Timor and Arafura Seas and Torres Strait, on its south the Southern Ocean*. The extreme points are Steep Point on the west, Cape Byron on the east, Cape York on the north, and South-East Cape or, if Tasmania be excluded, Wilson's Promontory, on the south. The difference in latitude between Cape York and Wilson's Promontory is 1,959 miles, and in longitude between Steep Point and Cape Byron 2,489 miles.

Tropical and temperate regions

Of the total area of Australia, nearly 39 per cent lies within the tropics. Taking the latitude of the Tropic of Capricorn as 23° 30′ S., the areas within the tropical and temperate zones are approximately as follows.

AREAS OF TROPICAL AND TEMPERATE REGIONS: STATES AND TERRITORIES
(Square miles)

Area	*N.S.W. (a)*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*Total*
Within tropical zone .	..	..	360,642	..	364,000	..	422,980	1,147,622
„ temperate zone	310,372	87,884	306,358	380,070	611,920	26,383	97,300	1,820,287
Total area .	**310,372**	**87,884**	**667,000**	**380,070**	**975,920**	**26,383**	**520,280**	**2,967,909**

(*a*) Includes Australian Capital Territory (939 square miles).

Fifty-four per cent of Queensland lies within the tropical zone and 46 per cent in the temperate zone; 37 per cent of Western Australia is tropical and 63 per cent temperate; while 81 per cent of the Northern Territory is tropical and 19 per cent temperate. All the remaining States lie within the temperate zone.

Area of Australia compared with areas of other countries

The area of Australia is almost as great as that of the United States of America excluding Alaska, four-fifths of that of Canada, more than half as large again as Europe excluding the U.S.S.R., and about twenty-five times that of Great Britain and Ireland. The areas of Australia and of certain other countries are shown in the table on the following page. The areas shown are in the main obtained from the *Statistical Yearbook* 1967, published by the Statistical Office of the United Nations, and the countries have been arranged in accordance with the continental groups used therein.

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* The Southern Ocean is a local designation for that part of the Indian Ocean lying between the southern shores of Australia and Antarctica.

AREA OF AUSTRALIA AND OF OTHER COUNTRIES, *circa* 1966

('000 square miles)

Country	*Area*
Continental divisions—	
Europe(*a*)	1,903
Asia(*a*)	10,629
U.S.S.R. (Europe and Asia)	8,649
Africa	11,704
North and Central America and West Indies	9,362
South America	6,889
Oceania	3,286
Total, World, excluding Arctic and Antarctic continents	**52,422**
Europe(*a*)—	
France	211
Spain (including possessions)	195
Sweden	174
Finland	130
Norway	125
Poland	121
Italy	116
Yugoslavia	99
Germany, Federal Republic of	96
United Kingdom	94
Romania	92
Other	451
Total, Europe(a)	*1,903*
Asia(*a*)—	
China (mainland)	3,692
India	1,176
Saudi Arabia	830
Iran	636
Mongolia	604
Indonesia	576
Pakistan	366
Trucial Oman	301
Turkey	301
Burma	262
Afghanistan	250
Thailand	198
Iraq	168
Other	1,269
Total, Asia(a)	*10,629*
U.S.S.R.—	
Total, U.S.S.R.	*8,649*
Africa—	
Sudan	967
Algeria	920
Congo, Democratic Republic of	906
Libya	679
Chad	496
Africa—*continued*	
Niger	489
Angola	481
Ethiopia	472
South Africa, Republic of	471
Mali	479
Mauritania	398
United Arab Republic	386
Tanzania, United Republic of	363
Nigeria	357
South-West Africa	318
Mozambique	302
Zambia	291
Somalia	246
Central African Republic	241
Madagascar	227
Kenya	225
Other	1,990
Total, Africa	*11,704*
North and Central America—	
Canada	3,852
United States of America(*b*)	3,615
Greenland	840
Mexico	762
Nicaragua	50
Cuba	44
Honduras	43
Other	155
Total, North and Central America	*9,362*
South America—	
Brazil	3,286
Argentina	1,072
Peru	496
Colombia (excluding Panama)	440
Bolivia	424
Venezuela	352
Chile	292
Paraguay	157
Ecuador	109
Other	260
Total, South America	*6,889*
Oceania—	
Australia	2,968
New Zealand	104
New Guinea(*c*)	92
Papua	86
Other	36
Total, Oceania	*3,286*

(*a*) Excludes U.S.S.R., shown below. (*b*) Includes Hawaii. (*c*) Australian Trust Territory. Western New Guinea (West Irian) is included in Other Asia.

AREAS OF STATES AND TERRITORIES, AND STANDARD TIMES

State or Territory	*Area*	*Percentage of total area*	*Standard times*	
			Meridian selected	*Ahead of G.M.T.*
	sq miles			hours
New South Wales	309,433	10.43	150° E.	10
Victoria	87,884	2.96	150° E.	10
Queensland	667,000	22.47	150° E.	10
South Australia . . .	380,070	12.81	142°30′E.	9½
Western Australia	975,920	32.88	120° E.	8
Northern Territory . .	520,280	17.53	142°30′E.	9½
Australian Capital Territory .	939	0.03	150° E.	10
Mainland	*2,941,526*	*99.11*	..	..
Tasmania	26,383	0.89	150° E.	10
Australia	**2,967,909**	**100.00**	..	..

The coastline of Australia is approximately 12,000 miles long—New South Wales, 700 miles; Victoria, 700 miles; Queensland, 3,200 miles; South Australia, 1,500 miles; Western Australia, 4,000 miles; Northern Territory, 1,000 miles; Australian Capital Territory, Jervis Bay area included in New South Wales; Tasmania, 900 miles. These measurements are broadly on a 'direct' basis, but even so they must be regarded as approximate only.

Geographical features of Australia

The following description is a broad summary of the main physical characteristics of the Australian continent.

A section through the Australian continent from east to west, at the point of its greatest breadth, shows first a narrow belt of coastal plain. This plain, extending north and south along the whole east coast, is well watered by rivers. It is of variable width, seldom more than sixty or seventy miles, and occasionally only a few miles, the average being roughly about forty to fifty miles. Bordering this plain is the Great Dividing Range, which extends from the north of Queensland to the south of New South Wales, and thence one branch sweeps westwards towards the boundary of Victoria and South Australia, and the other, the main branch, terminates in Tasmania. This range, which rises, often abruptly, from the plain, frequently presents bold escarpments on its eastern face, but the descent on its western slopes is gradual, until, in the country to the north of Spencer's Gulf, the plain is not above sea-level and occasionally even below it. Thence there is another almost imperceptible rise until the mountain ranges of Western Australia are reached, and beyond these lies another coastal plain. The mountains of Australia are relatively low, the highest peak, Mount Kosciusko, in New South Wales, being only about 7,300 feet. Three-quarters of the land-mass of Australia lies between the 600 and 1,500 feet contours in the form of a huge plateau, constituting the most distinctive feature of the Australian continent, to which the peculiarities of Australia's climate can probably be largely ascribed.

The rivers of Australia may be divided into two major classes, those of the coastal plains with moderate rates of fall and those of the central plains with very slight fall. Of the former not many are navigable for any distance from their mouths, and bars make many of them difficult of access or inaccessible from the sea.

The two longest rivers of the northern part of the east coast are the Burdekin and the Fitzroy in Queensland. The Hunter is the largest coastal river of New South Wales, and the Murray River, ith its great tributary the Darling, drains part of Queensland, the major part of New South Wales, and a large part of Victoria, finally flowing into the arm of the sea known as Lake Alexandrina, on the eastern side of the South Australian coast. The total length of the Murray is about 1,600 miles, 400 being in South Australia and 1,200 constituting the boundary between New South Wales and Victoria. The total length of the Murray-Darling from the source of the Darling to the mouth of the Murray is about 2,300 miles. The rivers of the north-west coast of Australia (Western Australia), e.g. the Murchison, Gascoyne, Ashburton, Fortesque, De Grey, Fitzroy, Drysdale, and Ord are of considerable size. So also are those in the Northern Territory, e.g. the Victoria and Daly, and those on the Queensland side of the Gulf of Carpentaria, such as the Gregory, Leichhardt, Cloncurry, Gilbert, and Mitchell. The rivers of Tasmania have short and rapid courses, as might be expected from the configuration of the country.

The 'lakes' of Australia may be divided into three classes: true permanent lakes; lakes which, being very shallow, become mere morasses in dry seasons or even dry up, and finally present a cracked surface of salt and dry mud; and lakes which are really inlets of the ocean, opening out into a lake-like expanse. The second class is the only one which seems to demand special mention. These are a characteristic of the great central plain of Australia. Some of them, such as Lakes Torrens, Gairdner, Eyre, and Frome, are of considerable extent.

For further information on the geographical features of Australia earlier issues of the Year Book should be consulted. The list of special articles, etc., at the end of this volume indicates the nature of the information available and its position in the various issues.

Weather and climate of Australia

This section has been prepared by the Director of the Commonwealth Bureau of Meteorology, and the various States and Territories have been arranged in the standard order adopted by that Bureau. The section concludes with a brief summary of the weather of 1968.

Introduction

Australia extends from about latitude 10° S. to latitude 44° S., but owing largely to the moderating effects of the surrounding oceans and the absence of very pronounced and extensive mountain masses it is less subject to extremes of climate than are regions of similar size in other parts of the world. The average elevation of the land surface is low—probably close to 900 feet above the sea; while the maximum altitude is just above 7,300 feet. Latitude for latitude the Australian climate is generally more temperate than that of the other large land masses of the earth, although it varies considerably from the tropical to the alpine.

The Australian meteorological seasons are: Summer—December, January, February; Autumn—March, April, May; Winter—June, July, August; Spring—September, October, November.

The following general discussion of the climate of Australia is necessarily brief. However, extensive records of Australian climatic data are held and published in various forms by the Bureau of Meteorology. A programme of regional climatic survey has been in progress for some years, and a large number of studies have been published by the Bureau of Meteorology, by the Department of National Development, and by State Development Authorities. The Bureau of Meteorology welcomes inquiries for climatic information, which may be made at its Central Office in Melbourne or through the Regional Offices which are situated in each of the State capital cities and in Canberra and Darwin. Reference may also be made to various bulletins and research papers mentioned in this text for more detailed information on particular topics.

Precipitation

Precipitation of moisture from the atmosphere may take various forms depending chiefly on the thermal conditions existing at the time. Within the Australian region precipitation occurs chiefly as rain because of the generally mild temperatures, but may also occur as snow or hail. Broadly, the immediate physical cause of rainfall may be said to be the lifting of moist air with resultant cooling, condensation into cloud, and eventual precipitation of the heavy water droplets as rain. This process may be achieved by three different means each of which may be combined with either or both of the others:

(*a*) Orographic lifting caused by winds blowing onto rising terrain;

(*b*) convectional lifting resulting in the development of individual rain clouds of the cumulus or cumulonimbus type producing showers and thunderstorms;

(*c*) lifting of a warm air mass as it rises over cooler air—known as a 'frontal' process.

Average annual rainfall. The distribution of the average annual rainfall over Australia is shown in plate 2 (between pages 32 and 33), while plate 3 shows the distribution in 1968.

While Australia is a continent of comparatively low relief, the orographic processes in rain production are very marked in the chain of the Great Dividing Range bordering the whole east coast of the continent, in the ranges of the south-western corner of Western Australia, and in Tasmania. Thus on the east coast the higher rainfall areas lie between the ranges and the Pacific Ocean in the region of prevailing south-east wind circulation. In Tasmania and the south-west of Western Australia the region of high rainfall lies between the ranges and the ocean to the west, these areas lying in a region of predominantly westerly wind flow.

The north-western part of the continent and to some extent the whole region of the Northern Territory and inland north Queensland comes under the influence of the Australian-Asian monsoon. This results in high rainfalls in a summer wet season with the inflow of moist air from the north-west, and a winter dry season with predominantly south-east winds blowing across the dry regions of the interior and producing little rainfall. Tropical cyclones affect the waters adjacent to the north-east and north-west of Australia between December and April. Their frequency varies greatly from season to season, but on the average about three of these disturbances occur in the Coral Sea each season and about two in the eastern Indian Ocean adjacent to the west coast of the continent. When tropical cyclones move close to the tropical coast of the continent they cause very heavy rainfalls over the coastal regions. On occasions these cyclones move over the land and lose intensity, but may still continue to be accompanied by heavy rainfall along their path.

Southern Australia lies in the region of the mid-latitude westerlies for the winter half of the year and is subject to the rain-producing influences of the great depressions of the Southern Ocean and their associated frontal systems. The combined effects of these systems and the topography lead to high winter rainfalls in south-western and south-eastern Australia and in Tasmania, with the highest falls occurring on the windward side of the mountains. The rainfall generally decreases inland with distance from the coast, although the 10-inch isohyet reaches the shore of the Great Australian Bight and the central western coast of Western Australia in regions which are of very flat relief and which, because of their position and the orientation of the coastline, are only rarely exposed to moist winds.

AREA DISTRIBUTION OF AVERAGE ANNUAL RAINFALL: STATES AND TERRITORIES
(Per cent)

Average annual rainfall	*W.A.*	*N.T.*	*S.A*	*Qld*	*N.S.W. (a)*	*Vic.*	*Tas.*	*Total*
Under 10 inches	58.0	24.7	82.8	13.0	19.7	Nil	Nil	39.0
10 and under 15 inches	22.4	32.4	9.4	14.4	23.5	22.4	Nil	20.6
15 ,, ,, 20 ,,	6.8	9.7	4.5	19.7	17.5	15.2	0.7	11.2
20 ,, ,, 25 ,,	3.7	6.6	2.2	18.8	14.2	17.9	11.0	9.0
25 ,, ,, 30 ,,	3.7	9.3	0.8	11.6	9.1	18.0	11.4	7.2
30 ,, ,, 40 ,,	3.3	4.7	0.3	11.1	9.9	16.1	20.4	6.1
40 inches and over	2.1	12.6	Nil	11.4	6.1	10.4	56.5	6.9
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(*a*) Includes Australian Capital Territory.

The region with the highest average annual rainfall is the east coast of Queensland between Port Douglas and Cardwell, where Tully has an annual average of 177 inches. A further very high rainfall region is the mountainous west coast of Tasmania, where Lake Margaret has the highest average annual total of 145 inches. The area of lowest average annual rainfall is that of some 180,000 square miles surrounding Lake Eyre in South Australia, where on the average only 4 to 6 inches are received annually. The lowest average over a long period of record is at Troudaninna—4.13 inches. Rain occurs very irregularly, averaging only about one or two days a month in this region.

Of all the continents (excluding Antarctica), Australia receives the least average depth of rainfall and has the least run-off from its rivers into the oceans. Only in relatively small areas of the continent could the rainfall be described as abundant.

Seasonal distribution of rainfall. The average monthly distribution of rainfall in the various Australian rainfall districts is shown by the histograms of plate 4.

The following are the most marked features.

(*a*) The clearly defined wet summer and dry winter of the monsoon region of northern Australia.

(*b*) The more regular distribution of rainfall throughout the year in south-eastern Australia. In the region to the south and west of the Great Dividing Range a less pronounced maximum of rainfall is noticeable in the winter or early spring. On the Gippsland (eastern Victoria) coast the rainfall is fairly evenly distributed throughout the year, but further along the east coast of the continent the rainfall minimum in late winter and early spring begins to appear and becomes more marked as the tropical regions are approached.

(*c*) The marked rainfall maximum in the south-western districts of Western Australia in winter—the period of the most active southern depressions and frontal systems in this region.

For further information on monthly rainfalls reference may be made to the various Australian rainfall bulletins, to the Climatological Surveys of particular districts, and to the annual rain maps and books of normals (standard 30 year periods), all published by the Bureau of Meteorology.

Variability of rainfall. For most agricultural pursuits a more important criterion of the value of rainfall is its variability or reliability. The adequate description of rainfall variability over an extensive geographical area is a matter of some difficulty. Probably the best available measures are to be found in the tables which have been calculated for a number of individual stations in some of the Climatological Survey districts. These tables show the percentage chances of receiving specified amounts of rainfall in monthly seasonal or annual time spans. Statistical indexes of rainfall variation based on a number of different techniques have been used to produce maps which show the main features of the variability of annual rainfall over Australia. A discussion of these methods and the maps is given by F. Loewe in *Some Considerations Regarding the Variability of Annual Rainfall in Australia*, Bureau of Meteorology Bulletin No. 39 (1948).

In general it may be stated that the regions of most reliable rainfall are the south-west of Western Australia, western Tasmania, and western and southern Victoria south of the divide. These areas have one of the most reliable rainfalls in the world. Elsewhere in Australia the degree of variability, in general, increases inland, but the region of the highest variability for low average annual rainfalls extends across the central part of the continent from south-western Queensland to the central coast of Western Australia. Some outstanding examples of the numerous instances of high rainfall variability throughout Australia are given below.

At Onslow (Western Australia) annual totals vary from 0.05 inches to 28 inches, and in the four consecutive years 1921 to 1924 the annual totals were 22.25, 2.71, 26.82, and 2.18 inches respectively. At Whim Creek, where 29.41 inches have been recorded in a single day, only 17 points (0.17 inches) were received in the whole of 1924. Great variability can also occur in the heavy rainfall areas, e.g. at Tully the annual rainfalls have varied from 310.92 inches in 1950 to 104.98 inches in 1943.

The following table of annual rainfall for the Australian capital cities for the past thirty years indicates the variation in rainfall at these sites.

RAINFALL: AUSTRALIAN CAPITAL CITIES, 1936 TO 1967

	Perth		*Adelaide*		*Brisbane*		*Sydney*		*Canberra(a)*		*Melbourne*		*Hobart(b)*	
Year	*Amount*	*No. of days*	*Amount*	*No. of days*	*Amount*	*No. of days*	*Amount*	*No. of days*	*Amount*	*No. of days*	*Amount*	*No. of days*	*Amount*	*No. of days*
	in		in		in		in		in		in		in	
1936	30.64	118	19.34	121	21.77	101	30.22	130	n.a.	n.a.	24.30	187	19.60	178
1937	35.28	120	23.01	128	34.79	113	52.00	157	n.a.	n.a.	21.45	144	20.65	160
1938	29.64	111	19.26	119	43.49	110	39.17	132	n.a.	n.a.	17.63	131	31.32	169
1939	45.70	123	23.29	139	41.43	122	33.67	127	n.a.	n.a.	33.11	166	27.23	188
1940	20.00	98	16.16	116	42.37	93	39.34	125	14.65	67	19.83	126	17.17	135
1941	34.74	122	22.56	126	31.50	105	26.74	129	21.33	93	31.78	157	23.49	145
1942	39.24	140	25.44	133	44.01	125	48.29	121	25.18	108	29.79	148	19.42	163
1943	31.46	117	17.84	135	50.68	126	50.74	136	22.82	141	18.80	150	20.84	149
1944	27.39	123	17.13	114	27.85	100	31.04	115	11.96	82	21.32	143	26.23	151
1945	52.67	137	17.85	105	48.16	130	46.47	136	23.76		19.22	152	16.92	157
1946	41.47	122	22.59	135	38.66	83	36.05	111	20.53	102	29.80	177	39.45	193
1947	43.42	137	21.89	146	60.30	146	41.45	137	26.30	121	30.47	163	38.61	181
1948	34.75	126	21.40	122	41.54	106	38.83	131	31.49	104	20.98	155	23.42	178
1949	27.15	126	18.23	119	47.18	121	66.26	149	25.42	115	31.41	163	22.85	157
1950	32.27	122	16.06	91	63.93	152	86.33	183	41.79	124	26.18	147	19.25	131
1951	34.14	127	25.44	135	33.89	87	53.15	143	18.97	95	29.85	155	24.57	163
1952	39.28	123	19.99	128	33.49	122	59.19	130	37.98	143	34.39	177	30.35	165
1953	37.14	119	20.00	121	43.60	101	40.86	110	19.42	110	28.38	148	28.06	162
1954	28.05	112	16.73	109	61.36	142	41.29	134	18.00	80	33.53	139	27.20	143
1955	46.52	138	24.58	134	50.41	136	72.46	160	28.92	128	30.70	160	22.32	168
1956	37.35	107	27.24	154	59.18	120	67.33	155	34.90	159	30.96	188	36.63	175
1957	33.40	117	16.71	110	20.58	80	27.13	110	13.39	78	20.68	146	28.66	129
1958	32.08	107	17.57	121	46.61	115	59.19	144	23.51	106	26.98	155	36.55	166
1959	24.23	114	11.32	88	45.84	146	59.67	164	35.07	106	25.84	131	19.28	136
1960	28.21	112	23.07	129	27.51	103	51.01	152	31.98	128	33.50	162	29.35	140
1961	32.27	113	14.91	122	42.36	134	57.08	161	30.42	109	22.05	129	18.03	156
1962	28.75	123	17.96	125	41.39	131	44.90	137	25.71	122	23.06	140	25.40	161
1963	39.14	140	24.43	118	49.09	134	80.11	169	24.32	126	29.04	149	15.51	129
1964	38.40	127	21.89	135	48.18	112	43.30	99	25.29	106	27.80	166	28.06	169
1965	40.98	128	13.34	111	41.02	113	36.01	118	15.72	87	23.24	122	20.98	158
1966	30.45	116	19.49	123	43.80	111	48.40	130	27.22	117	26.81	156	27.52	145
1967	41.26	104	10.11	89	70.80	137	52.78	141	13.84	72	13.06	106	19.23	130
Average . . .	34.89	121	20.77	121	44.89	124	47.75	149	24.68	108	25.87	143	24.80	165
No. of years . .	92	92	129	129	116	108	109	109	29	28	112	112	85	85
Standard 30 years' normal(c) . .	35.99	128	21.09	122	40.09	117	44.80	143	(*d*)24.53	(*d*)103	25.89	156	25.03	180

(*a*) Fairbairn Aerodrome; records in issues of the Year Book prior to No. 36 were for the station at Acton which closed down in 1939, while from Year Book No. 36 to Year Book No. 53 records were for the Commonwealth Forestry Bureau station. (*b*) Records taken from present site commenced 1883. (*c*) 1911–1940. (*d*) Commonwealth Forestry Bureau; thirty years to 1957 inclusive.

Prolonged dry spells are fairly common in much of Australia, particularly in inland areas. A detailed discussion of the history of droughts and the frequency in particular areas may be found in Foley, J. C., *Droughts in Australia*, Bureau of Meteorology Bulletin No. 43 (1957). A shorter account of droughts in Australia will be found in a special article in Year Book No. 45, pages 51–6. A more recent account is included with Chapter 22—Water Conservation and Irrigation in Year Book No. 54 of 1968.

Rainfall and vegetation. In general, the three main climatic zones of the continent exert a particular controlling influence on the general vegetation. These are the northern third of the continent where rainfall is almost always restricted to the warmer months of the year, the southern third where rainfall is predominantly a winter and spring event, and a transitional zone which experiences rainfall from both sources, although in greatly reduced quantity over the interior, which is subject to frequent drought.

The length of the growing season, or conversely the extent of dry periods during the year, decides the type of vegetation which establishes in a region. The climatic influence on vegetative response is primarily through soil moisture and temperature. Thus in colder south-eastern areas the growing season is mainly temperature dependent, but elsewhere the availability of soil moisture is the prime factor. All rainfall is not equally effective in increasing the soil moisture, its availability from the soil storage to plants depending on the extent of surface run-off, seepage beyond the root zone, and loss by surface evaporation. Furthermore, the effectiveness of available soil moisture depends on the evaporative demand of the local climate; for example, an inch of stored moisture may maintain vigorous plant growth for twice as long in Tasmania as in the warmer, drier atmosphere of inland New South Wales. Thus it is not a sound practice to assess the agricultural potential of different areas simply by reference to average rainfall.

Generally speaking, the length of the growing season exceeds nine months over the far south-west of Western Australia and in all eastern coastal districts from Cape York Peninsula to western Victoria, and within this region humid and semi-humid plant formations thrive. Soil types, of course, also play a part in the distribution of vegetation, but they too are, to a considerable extent, the result of climate and weather.

The climate of Arnhem Land (Northern Territory) is such that there is a considerable surplus of moisture for about five months of the warm season, followed regularly by a virtual drought which frequently reaches severe intensity, and this special combination of meteorological conditions results in annual and perennial vegetation adapted to this cycle.

Over the interior the position is more complex because of the lower levels of the rainfall, its greater variability, and the high evaporative power of the drier, warmer atmosphere. In this vast section of the continent the climatic demands are so severe that the vegetative formations of the moister zones (i.e. the mesophytes, requiring about five months or longer growing season) are unable to exist. Thus a plant species adapted to these very dry and variable conditions (xerophytes), e.g. spinifex, salt bush, blue bush, and stunted eucalypts, capable of maintaining a cattle population, predominates over the arid interior.

The arid and semi-arid lands of Western Australia and inland New South Wales which border the desert carry the majority of the sheep in these States. In New South Wales the most important vegetative formations in these areas are savannah (treeless plains), savannah woodland, mulga scrub, and mallee scrub. In Western Australia sclerophyllous grass steppe and mulga scrub border the deserts and are succeeded to the south by zones of mallee scrub and mallee heath.

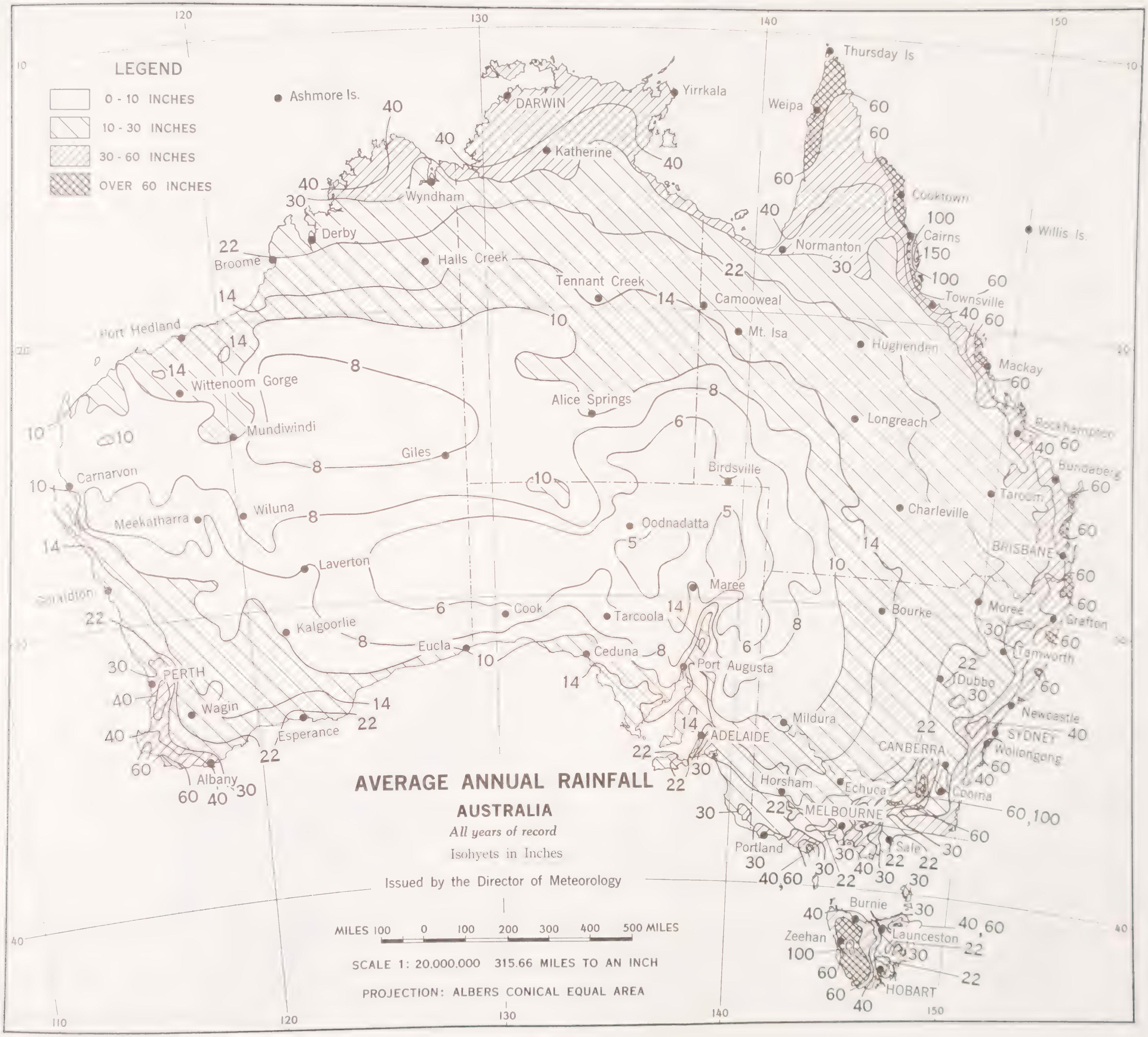
Rainfall intensity. The study of extremely high rainfall intensities is important in the investigation of the flow characteristics of river systems, and flood prevention measures, the design of irrigation works, and hydro-electric schemes. The highest rainfalls recorded in a period of twenty-four hours up to 1967 for each State and Territory were: Western Australia, Whim Creek, 29.41 inches, 3 April 1898; Northern Territory, Roper Valley, 21.44 inches, 15 April 1963; South Australia, Ardrossan, 8.10 inches, 18 February 1946; Queensland, Crohamhurst, 35.71 inches, 3 February 1893; New South Wales, Dorrigo, 25.04 inches, 24 June 1950; Australian Capital Territory, Jervis Bay, 7.15 inches, 29 April 1963; Victoria, Balook, 10.81 inches, 18 February 1951; and Tasmania, Mathinna, 13.25 inches, 5 April 1929. Most of the very high intensities have occurred in the coastal strip of Queensland, where the combination of a tropical cyclone moving close to mountainous terrain provides ideal conditions for spectacular falls. For other very heavy falls at various localities reference may be made to Year Books No. 14, pages 60–4, No. 22, pages 46–8, No. 29, pages 43, 44 and 51, and No. 53, pages 32–4.

Snow and hail. For varying periods from late autumn to early spring snow usually covers the ground to a great extent on the Australian Alps above a level of about 4,500 to 5,000 feet, where in both New South Wales and Victoria ski-ing resorts operate throughout the season.

In Tasmania also the highlands are frequently covered above the 3,500 feet level for extended periods of the winter. There are, however, some years when snowfalls are much lighter than normal and even fail completely. Light snow has been known to fall occasionally as far north as the New England plateau in New South Wales (latitude 31° S.), and in exceptional seasons much of the dividing range from Victoria to Toowoomba (Queensland) has been covered above a level of about 4,000 feet. In ravines around Mount Kosciusko small areas of snow may persist throughout the summer after a heavy winter fall. This winter snowfall of south-eastern Australia is important in aiding the reliable flow of many streams which are utilised in the hydro-electric schemes of the Snowy Mountains, northern Victoria, and Tasmania. Snowfall at low terrain elevations occurs from time to time, particularly in Tasmania and Victoria, but falls are usually light and rarely lie more than a few days.

Hail is most frequent in winter and spring along the south-eastern coastal region of the continent and in Tasmania, where it is usually of a relatively small size. Summer storms, however, which are quite frequent, particularly in the highland plateau regions of eastern Australia, often produce stones of large size and of destructive intensity. Very large stones capable of piercing light gauge galvanised iron are reported from time to time, and damage to fruit crops in south-eastern Australia from large hail stones is quite frequent.

Floods. In general, flooding in Australia is most pronounced on the shorter streams flowing from the Great Dividing Range into the Pacific Ocean along the seaboard of Queensland and New South Wales. These floods are particularly destructive on the more densely populated coast


LEGEND
0 - 10 INCHES
10 - 30 INCHES
30 - 60 INCHES
OVER 60 INCHES
AVERAGE ANNUAL RAINFALL
AUSTRALIA
All years of record
Isohyets in Inches
Issued by the Director of Meteorology
MILES 100 0 100 200 300 400 500 MILES
SCALE 1: 20.000.000 315.66 MILES TO AN INCH
PROJECTION: ALBERS CONICAL EQUAL AREA
110
120
130
140
150
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40
Ashmore Is.
DARWIN
Yirrkala
Thursday Is
Weipa
Katherine
Wyndham
Derby
Broome
Halls Creek
Tennant Creek
Camooweal
Normanton
Cooktown
Cairns
Willis Is.
Townsville
Port Hedland
Mt. Isa
Hughenden
Mackay
Wittenoom Gorge
Alice Springs
Longreach
Rockhampton
Mundiwindi
Giles
Birdsville
Bundaberg
Carnarvon
Taroom
Meekatharra
Wiluna
Oodnadatta
Charleville
BRISBANE
Laverton
Maree
Geraldton
Bourke
Moree
Grafton
Kalgoorlie
Cook
Tarcoola
Tamworth
Eucla
Ceduna
Port Augusta
Dubbo
PERTH
Newcastle
Wagin
Esperance
Mildura
SYDNEY
ADELAIDE
Wollongong
CANBERRA
Albany
Horsham
Echuca
Cooma
MELBOURNE
Portland
Sale
Burnie
Launceston
Zeehan
HOBART

PLATE 2

hs show the average
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boundaries of which
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names are given in
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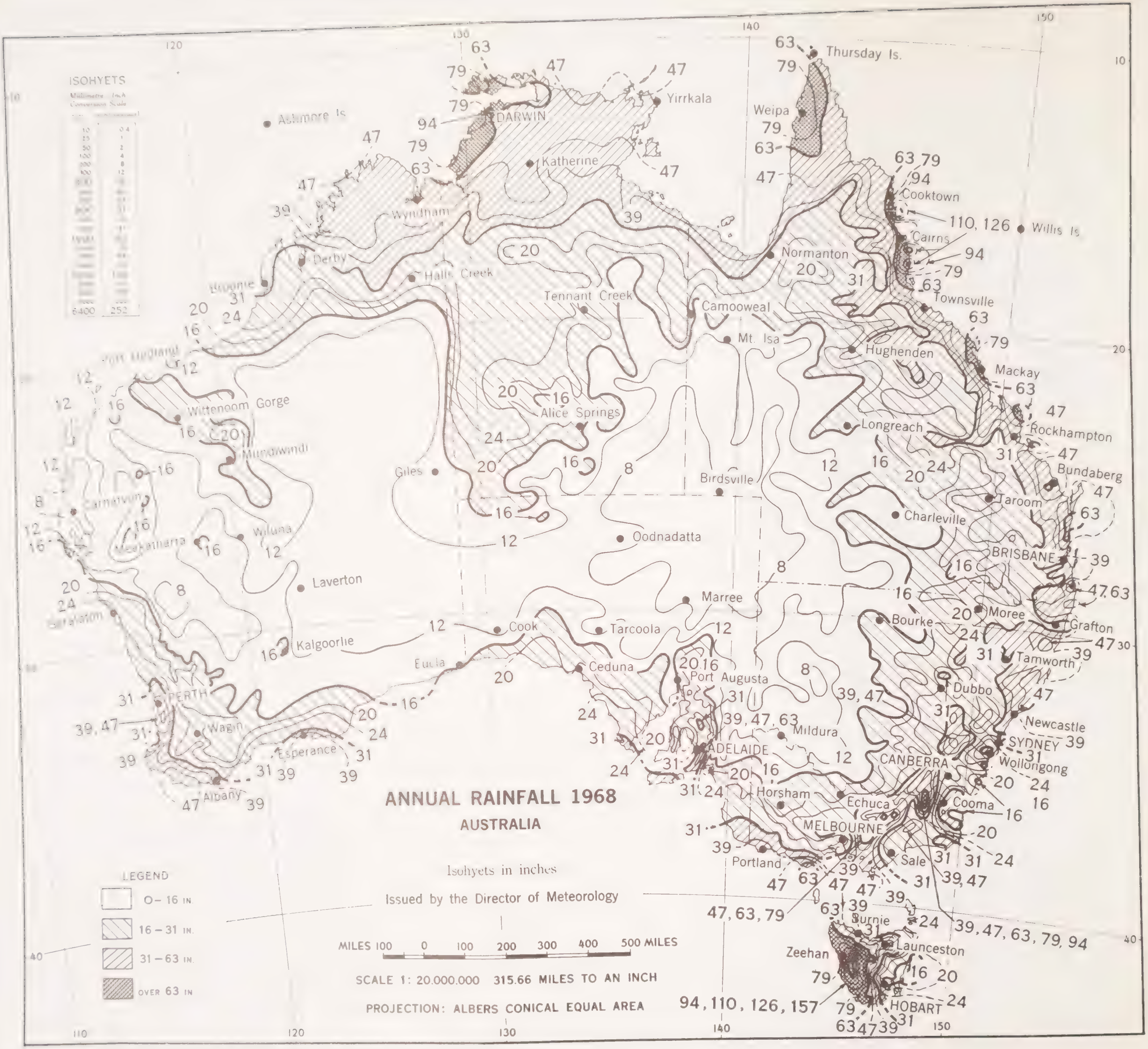
according to the
of Meteorology.


ANNUAL RAINFALL 1968
AUSTRALIA
Isohyets in inches
Issued by the Director of Meteorology
ISOHYETS
Millimetre Inch Conversion Scale
LEGEND
O – 16 IN.
16 – 31 IN.
31 – 63 IN.
OVER 63 IN.
MILES 100 0 100 200 300 400 500 MILES
SCALE 1: 20.000.000 315.66 MILES TO AN INCH
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Mundiwindi
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Rockhampton
Giles
Birdsville
Bundaberg
Carnarvon
Taroom
Charleville
Meekatharra
Wiluna
Oodnadatta
BRISBANE
Laverton
Marree
Geraldton
Bourke
Moree
Grafton
Cook
Tarcoola
Kalgoorlie
Eucla
Ceduna
Tamworth
Port Augusta
Dubbo
PERTH
Mildura
Newcastle
Wagin
ADELAIDE
SYDNEY
Esperance
CANBERRA
Wollongong
Horsham
Albany
Echuca
Cooma
MELBOURNE
Portland
Sale
Burnie
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HOBART
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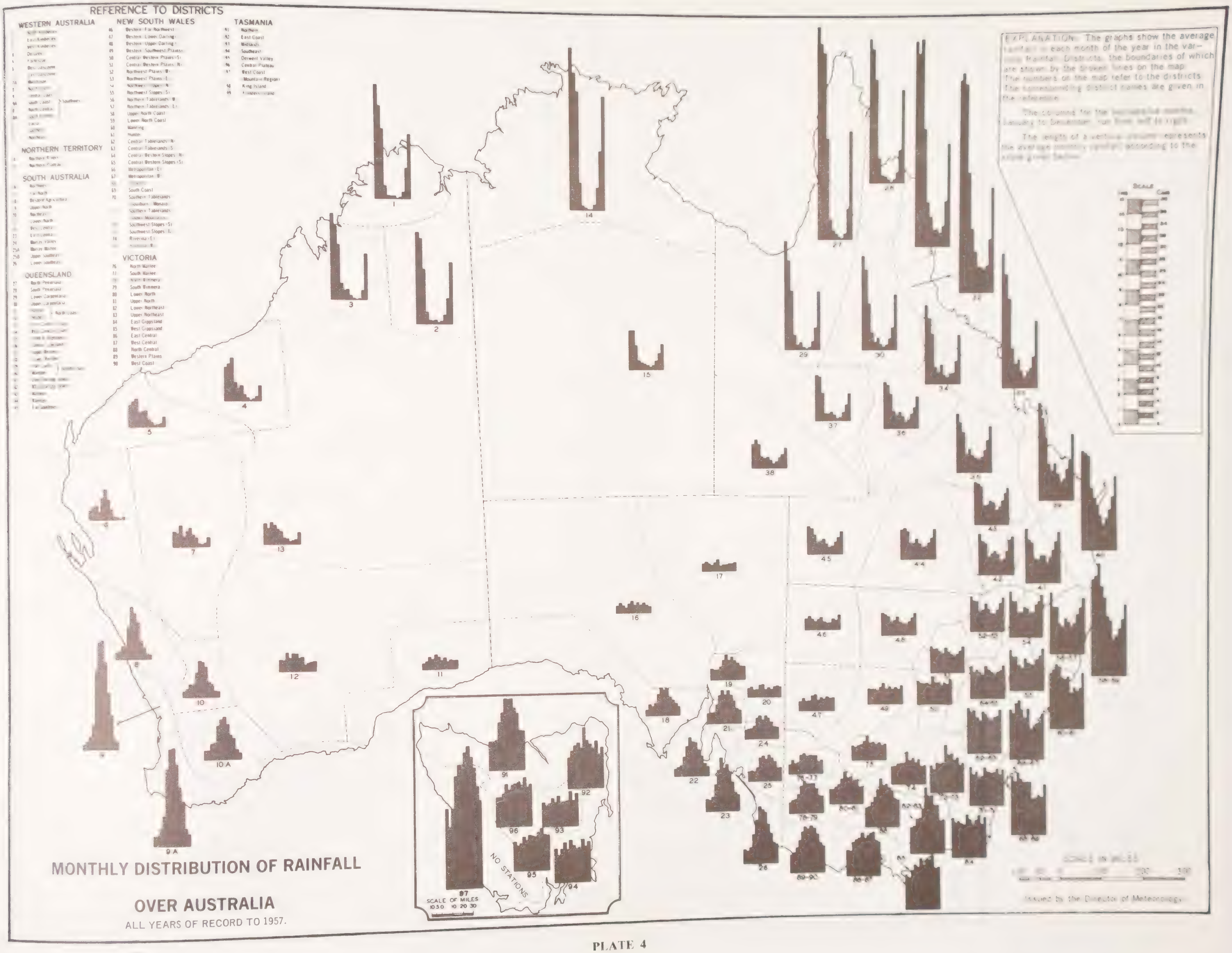
PLATE 3



MONTHLY DISTRIBUTION OF RAINFALL OVER AUSTRALIA

ALL YEARS OF RECORD TO 1957.

EXPLANATION: The graphs show the average rainfall in each month of the year in the various Rainfall Districts, the boundaries of which are shown by the broken lines on the map. The numbers on the map refer to the districts. The corresponding district names are given in the reference.

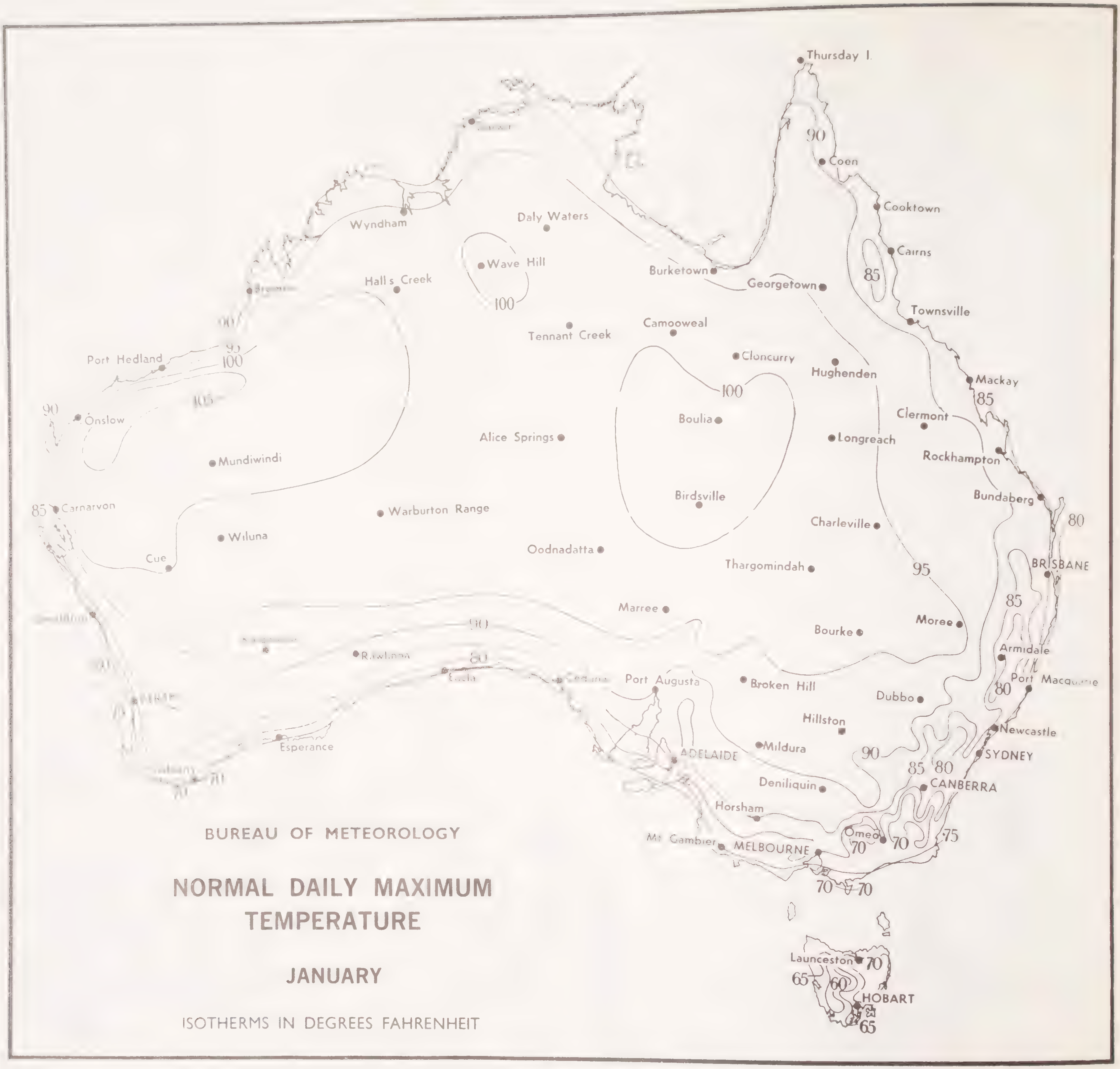
The columns for the successive months, January to December, run from left to right.

The length of a vertical column represents the average monthly rainfall according to the scale given below.

Issued by the Director of Meteorology.

REFERENCE TO DISTRICTS
WESTERN AUSTRALIA
NORTHERN TERRITORY
SOUTH AUSTRALIA
QUEENSLAND
NEW SOUTH WALES
46 Western (Far Northwest)
47 Western (Lower Darling)
48 Western (Upper Darling)
49 Western (Southwest Plains)
50 Central Western Plains (S)
51 Central Western Plains (N)
52 Northwest Plains (W)
53 Northwest Plains (E)
55 Northwest Slopes (S)
56 Northern Tablelands (W)
57 Northern Tablelands (E)
58 Upper North Coast
59 Lower North Coast
60 Manning
61 Hunter
62 Central Tablelands (N)
63 Central Tablelands (S)
64 Central Western Slopes (N)
65 Central Western Slopes (S)
66 Metropolitan (E)
67 Metropolitan (W)
69 South Coast
70 Southern Tablelands
Goulburn - Monaro
Southern Tablelands
Southwest Slopes (S)
Southwest Slopes (N)
74 Riverina (E)
VICTORIA
76 North Mallee
77 South Mallee
79 South Wimmera
80 Lower North
81 Upper North
82 Lower Northeast
83 Upper Northeast
84 East Gippsland
85 West Gippsland
86 East Central
87 West Central
88 North Central
89 Western Plains
90 West Coast
TASMANIA
91 Northern
92 East Coast
93 Midlands
94 Southeast
95 Derwent Valley
96 Central Plateau
97 West Coast (Mountain Region)
98 King Island
99 Flinders Island
SCALE
SCALE IN MILES
SCALE OF MILES
10 5 0 10 20 30
NO STATIONS
1
2
3
4
5
6
7
8
9
9A
10
10A
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
52-53
54
56-57
58-59
60-61
62-63
64-65
66-67
69
68-69
73
74
76-77
78-79
80-81
82-83
84
85
86-87
89-90
91
92
93
94
95
96
97

PLATE 4


Thursday I.
90
Coen
Cooktown
Cairns
85
Townsville
Wyndham
Daly Waters
Wave Hill
100
Burketown
Georgetown
Hall s Creek
Tennant Creek
Camooweal
90
95
100
Port Hedland
105
Cloncurry
Hughenden
100
90
Onslow
Mackay
85
Boulia
Clermont
Alice Springs
Longreach
Rockhampton
Mundiwindi
Birdsville
Bundaberg
85
Carnarvon
Warburton Range
80
Charleville
Wiluna
Oodnadatta
Cue
Thargomindah
95
BRISBANE
85
Marree
90
Bourke
Moree
Rawlinna
80
Armidale
Port Augusta
Broken Hill
Port Macquarie
80
Dubbo
Hillston
Newcastle
Esperance
ADELAIDE
Mildura
90
SYDNEY
85
80
Deniliquin
CANBERRA
70
Horsham
Omeo
70
70
75
Mt Gambier
MELBOURNE
70
70
Launceston
70
65
60
HOBART
65

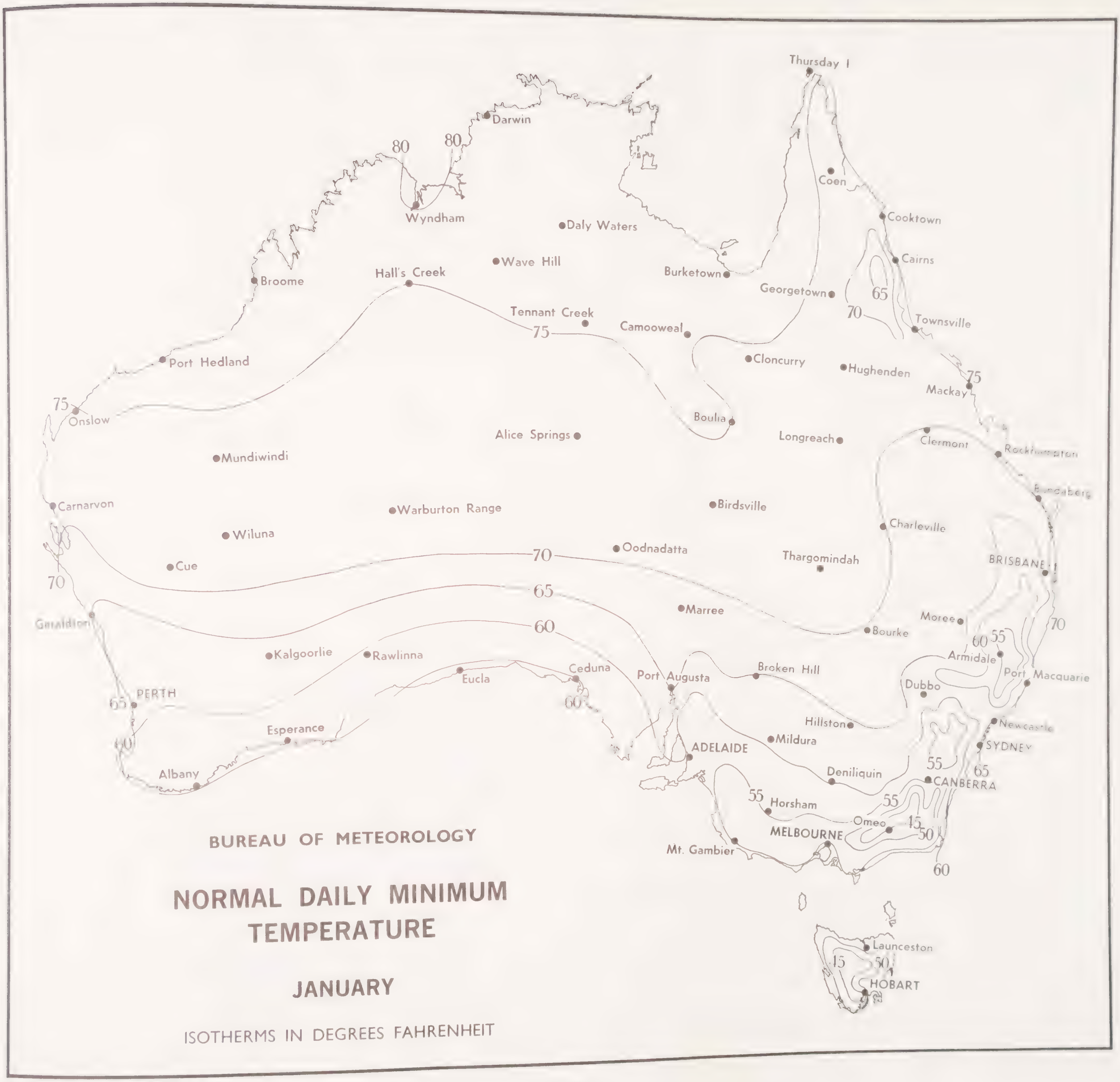
BUREAU OF METEOROLOGY

NORMAL DAILY MAXIMUM TEMPERATURE

JANUARY

ISOTHERMS IN DEGREES FAHRENHEIT

PLATE 5


Thursday I
Darwin
80
80
Wyndham
Daly Waters
Coen
Cooktown
Cairns
65
Wave Hill
Burketown
Georgetown
70
Townsville
Broome
Hall's Creek
Tennant Creek
75
Camooweal
Cloncurry
Hughenden
75
Mackay
Port Hedland
75
Onslow
Boulia
Alice Springs
Longreach
Clermont
Rockhampton
Mundiwindi
Bundaberg
Carnarvon
Warburton Range
Birdsville
Charleville
Wiluna
Oodnadatta
70
Thargomindah
BRISBANE
Cue
70
65
Marree
Bourke
Moree
70
Geraldton
60
60
55
Armidale
Kalgoorlie
Rawlinna
Broken Hill
Port Macquarie
Eucla
Ceduna
Port Augusta
Dubbo
65
PERTH
60
Hillston
Newcastle
Esperance
Mildura
SYDNEY
60
ADELAIDE
55
Albany
Deniliquin
65
CANBERRA
55
Horsham
55
Omeo
45
50
MELBOURNE
Mt. Gambier
60
Launceston
45
50
HOBART

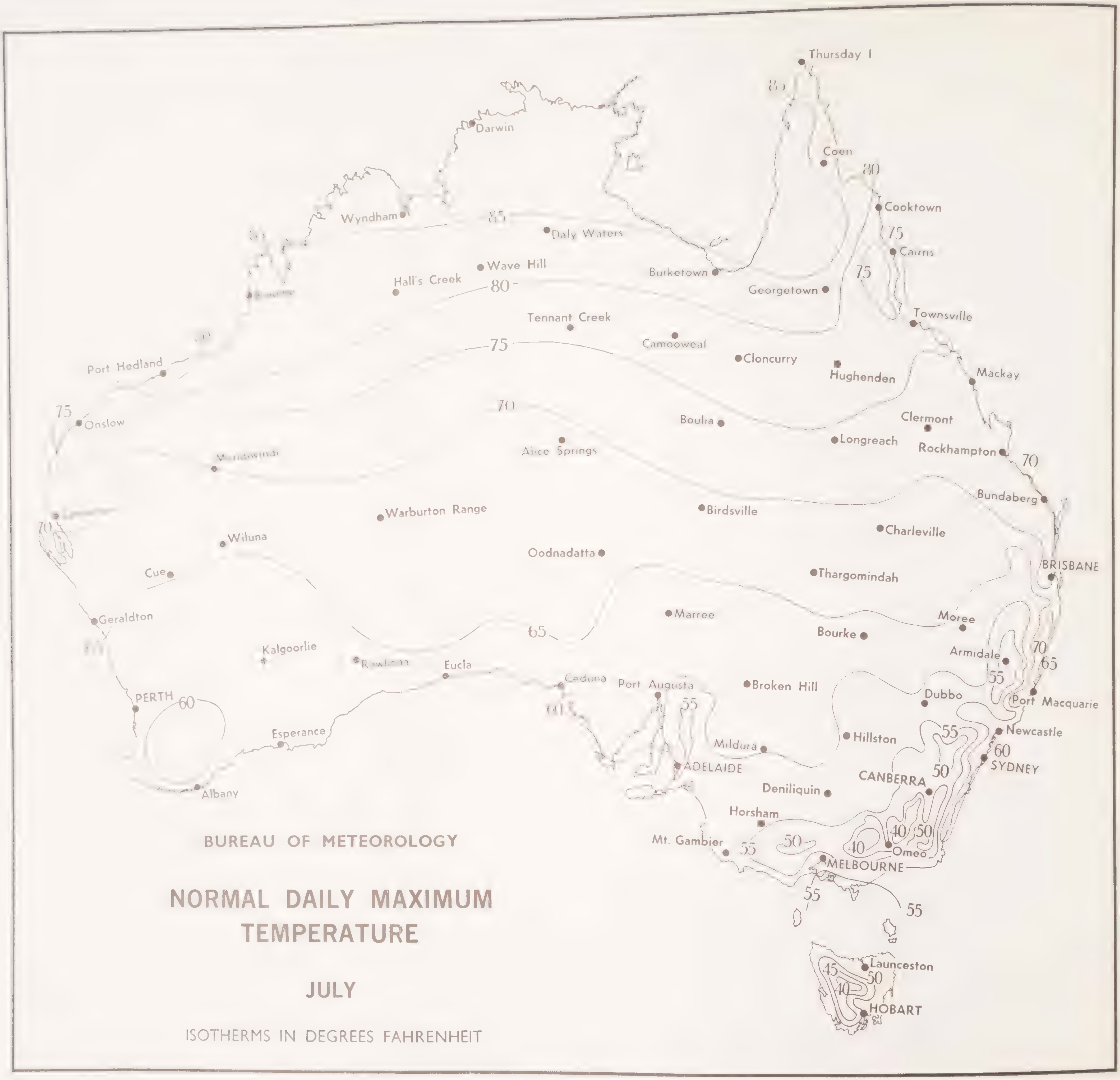
BUREAU OF METEOROLOGY

NORMAL DAILY MINIMUM TEMPERATURE

JANUARY

ISOTHERMS IN DEGREES FAHRENHEIT

PLATE 6


Thursday I
Coen
Cooktown
Cairns
Townsville
Mackay
Rockhampton
Bundaberg
BRISBANE
Darwin
Wyndham
Daly Waters
Wave Hill
Hall's Creek
Burketown
Georgetown
Tennant Creek
Camooweal
Cloncurry
Hughenden
Port Hedland
Onslow
Boulia
Clermont
Longreach
Alice Springs
Warburton Range
Birdsville
Charleville
Wiluna
Cue
Oodnadatta
Thargomindah
Geraldton
Marree
Moree
Bourke
Kalgoorlie
Eucla
Ceduna
Port Augusta
Broken Hill
Armidale
Dubbo
Port Macquarie
PERTH
Esperance
Hillston
Newcastle
Mildura
SYDNEY
ADELAIDE
CANBERRA
Albany
Deniliquin
Horsham
Mt. Gambier
Omeo
MELBOURNE
Launceston
HOBART
85
80
75
70
65
60
55
50
45
40

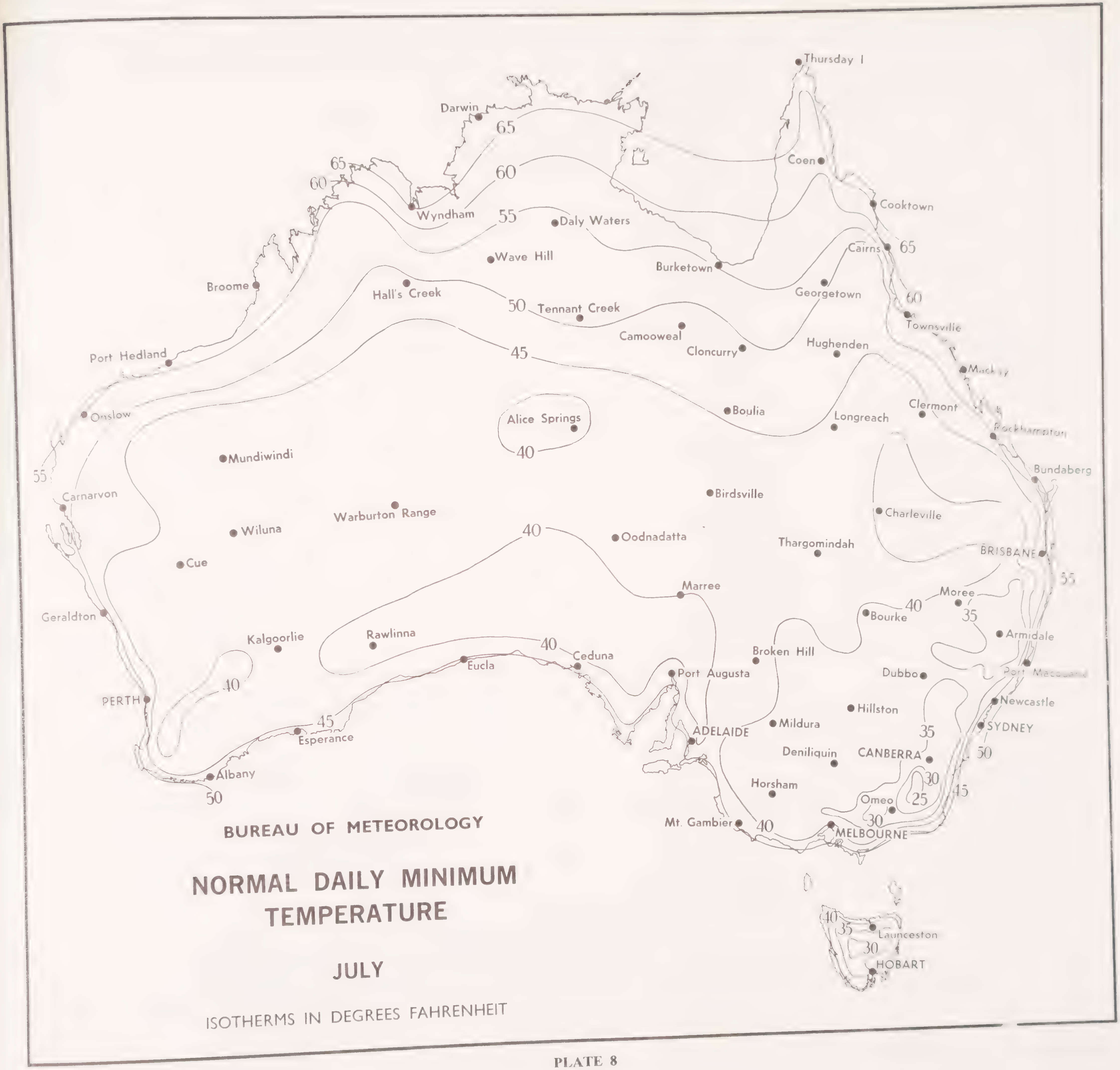
BUREAU OF METEOROLOGY

NORMAL DAILY MAXIMUM TEMPERATURE

JULY

ISOTHERMS IN DEGREES FAHRENHEIT

PLATE 7


Thursday I
Darwin
65
60
55
50
45
40
35
30
25
Coen
Cooktown
Wyndham
Daly Waters
Cairns
Wave Hill
Burketown
Broome
Hall's Creek
Georgetown
Tennant Creek
Camooweal
Townsville
Cloncurry
Hughenden
Port Hedland
Mackay
Onslow
Alice Springs
Boulia
Longreach
Clermont
Rockhampton
Mundiwindi
Bundaberg
Carnarvon
Birdsville
Charleville
Warburton Range
Wiluna
Oodnadatta
Thargomindah
BRISBANE
Cue
Marree
Moree
Geraldton
Bourke
Armidale
Kalgoorlie
Rawlinna
Ceduna
Broken Hill
Eucla
Port Augusta
Dubbo
Port Macquarie
PERTH
Newcastle
Hillston
Mildura
ADELAIDE
SYDNEY
Esperance
Deniliquin
CANBERRA
Horsham
Albany
Omeo
Mt. Gambier
MELBOURNE
Launceston
HOBART

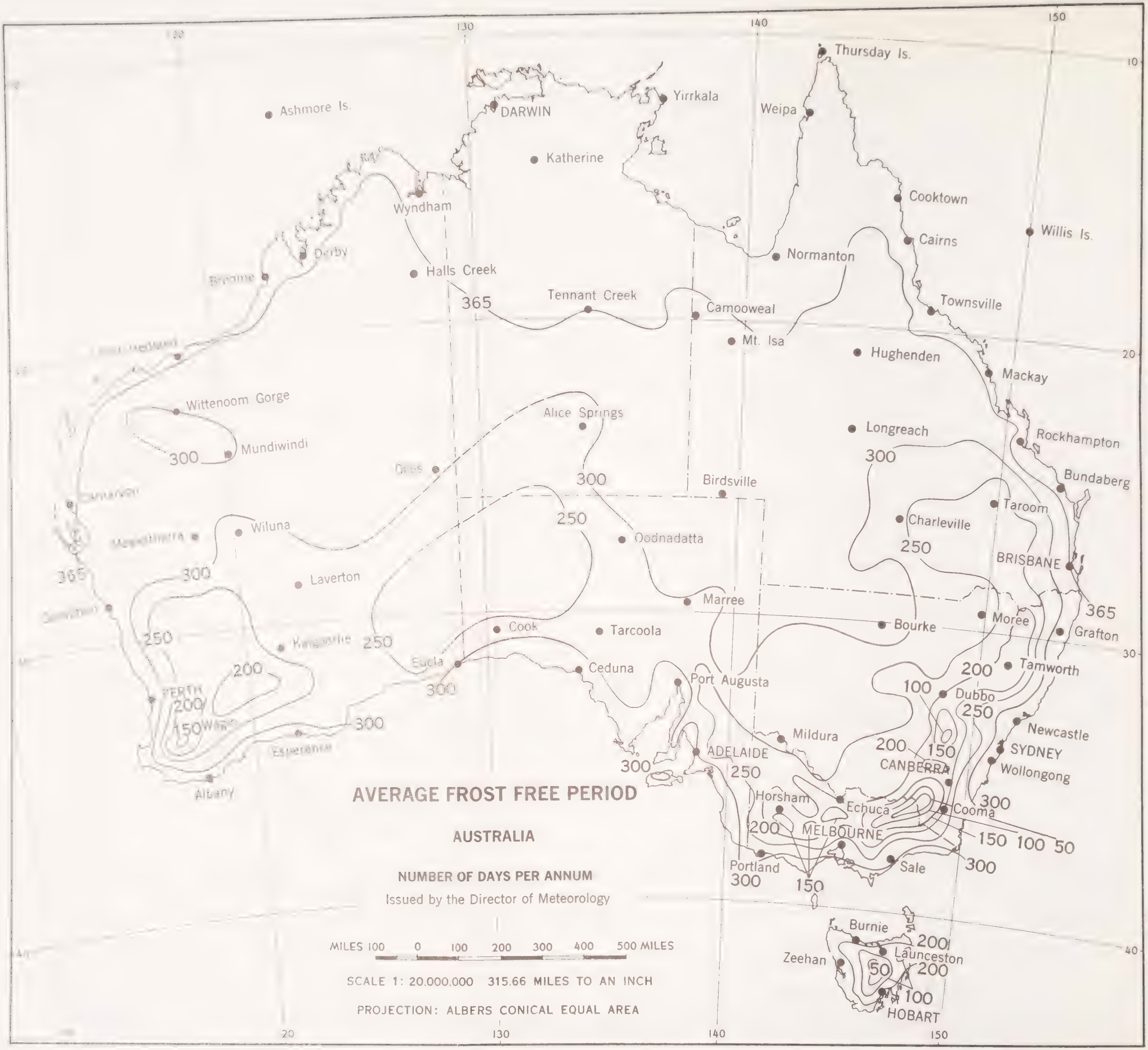
BUREAU OF METEOROLOGY

NORMAL DAILY MINIMUM TEMPERATURE

JULY

ISOTHERMS IN DEGREES FAHRENHEIT

PLATE 8



AVERAGE FROST FREE PERIOD

AUSTRALIA

NUMBER OF DAYS PER ANNUM

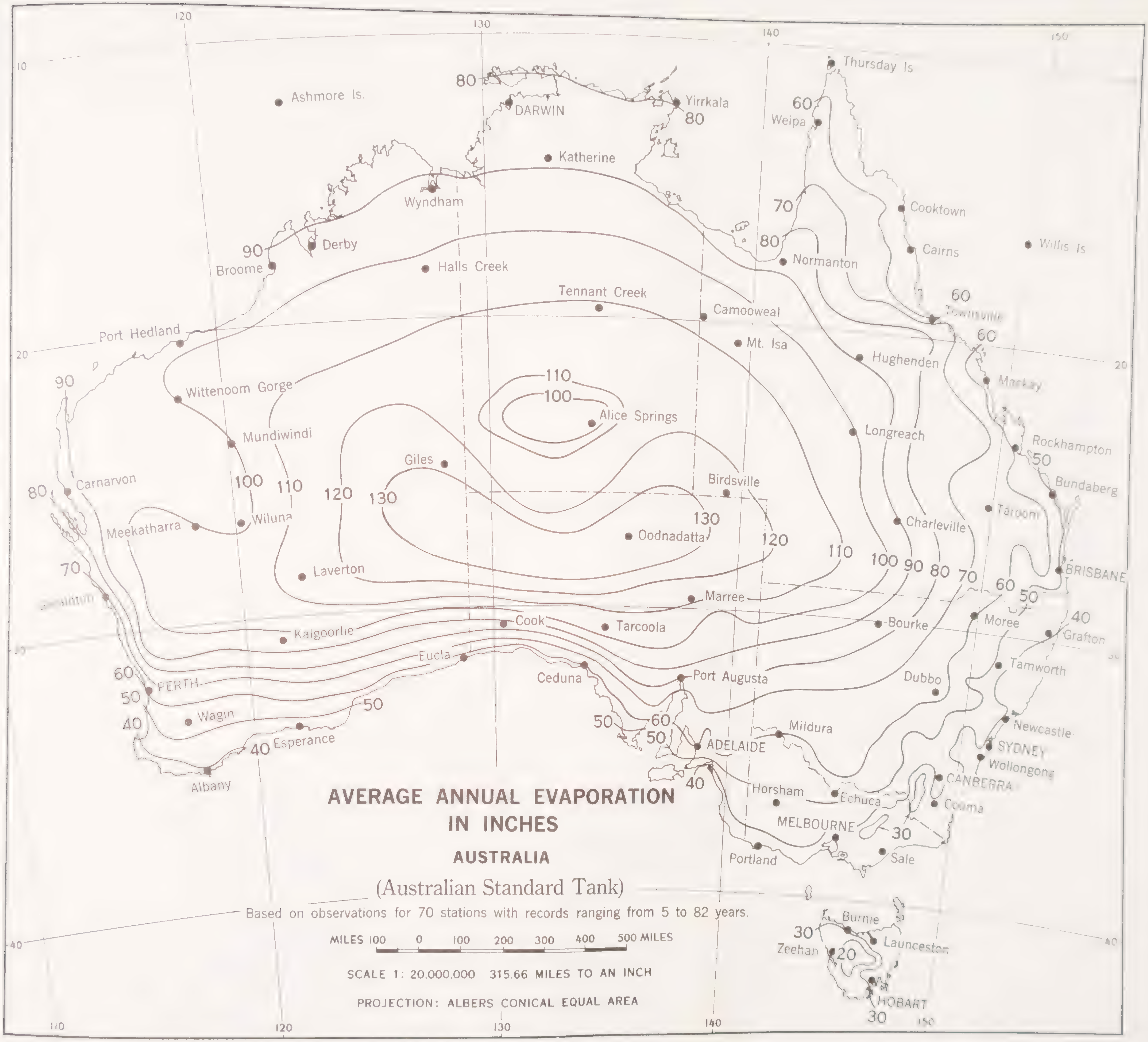
Issued by the Director of Meteorology

SCALE 1: 20.000.000 315.66 MILES TO AN INCH

PROJECTION: ALBERS CONICAL EQUAL AREA

MILES 100 0 100 200 300 400 500 MILES
120
130
140
150
10
20
30
40
Thursday Is.
Weipa
Yirrkala
DARWIN
Ashmore Is.
Katherine
Wyndham
Derby
Broome
Halls Creek
Cooktown
Cairns
Willis Is.
Normanton
Townsville
365
Tennant Creek
Camooweal
Mt. Isa
Hughenden
Mackay
Port Hedland
Wittenoom Gorge
Mundiwindi
300
Alice Springs
Longreach
Rockhampton
300
Giles
300
Birdsville
Bundaberg
Taroom
Carnarvon
Charleville
250
Wiluna
Meekatharra
Oodnadatta
250
BRISBANE
365
300
Laverton
Marree
365
Geraldton
Moree
Bourke
Grafton
Cook
Tarcoola
250
250
Kalgoorlie
Eucla
Ceduna
200
Tamworth
200
Port Augusta
100
Dubbo
PERTH
300
250
200
Newcastle
150
Wagin
300
Mildura
200
150
SYDNEY
Esperance
ADELAIDE
CANBERRA
Wollongong
300
Albany
250
Horsham
Echuca
300
Cooma
200
MELBOURNE
150 100 50
Portland
Sale
300
300
150
Burnie
200
Launceston
Zeehan
50
200
100
HOBART

PLATE 9



AVERAGE ANNUAL EVAPORATION IN INCHES

AUSTRALIA

(Australian Standard Tank)

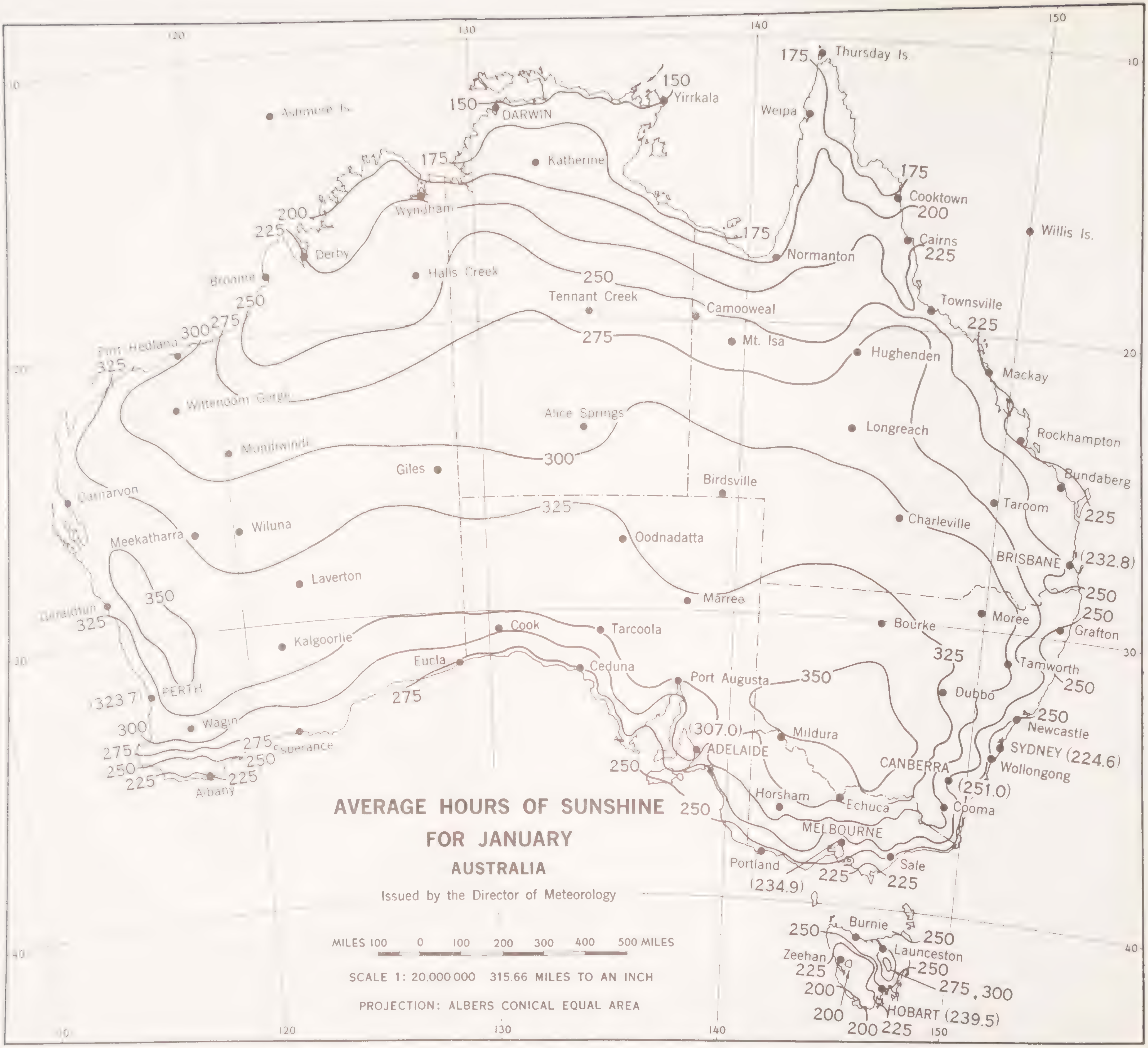
Based on observations for 70 stations with records ranging from 5 to 82 years.

MILES 100 0 100 200 300 400 500 MILES

SCALE 1: 20.000.000 315.66 MILES TO AN INCH

PROJECTION: ALBERS CONICAL EQUAL AREA

120
130
140
150
10
20
30
40
110
Thursday Is
Ashmore Is.
DARWIN
Yirrkala
Weipa
Katherine
Wyndham
Cooktown
Derby
Broome
Halls Creek
Normanton
Cairns
Willis Is
Tennant Creek
Camooweal
Townsville
Port Hedland
Mt. Isa
Hughenden
Mackay
Wittenoom Gorge
Alice Springs
Mundiwindi
Longreach
Rockhampton
Giles
Carnarvon
Birdsville
Bundaberg
Taroom
Meekatharra
Wiluna
Oodnadatta
Charleville
Laverton
BRISBANE
Geraldton
Marree
Moree
Bourke
Kalgoorlie
Cook
Tarcoola
Grafton
Tamworth
Eucla
Ceduna
PERTH
Port Augusta
Dubbo
Wagin
Esperance
Mildura
Newcastle
ADELAIDE
SYDNEY
Wollongong
Albany
CANBERRA
Horsham
Echuca
Cooma
MELBOURNE
Portland
Sale
Burnie
Launceston
Zeehan
HOBART
80
80
60
70
80
90
60
60
90
110
100
80
100
110
120
130
130
120
110
100
90
80
70
60
50
50
70
40
60
50
40
50
40
50
60
50
40
30
30
20
30



AVERAGE HOURS OF SUNSHINE FOR JANUARY

AUSTRALIA

Issued by the Director of Meteorology

MILES 100 0 100 200 300 400 500 MILES

SCALE 1: 20.000 000 315.66 MILES TO AN INCH

PROJECTION: ALBERS CONICAL EQUAL AREA

120
130
140
150
10
20
30
40
Thursday Is.
175
Yirrkala
150
DARWIN
Ashmore Is.
Weipa
Katherine
Wyndham
Derby
Broome
Halls Creek
Cooktown
200
Willis Is.
Cairns
225
Normanton
Tennant Creek
250
Camooweal
Townsville
Port Hedland
300
275
325
Mt. Isa
Hughenden
Mackay
Wittenoom Gorge
Alice Springs
Longreach
Rockhampton
Mundiwindi
Giles
Birdsville
Bundaberg
Carnarvon
Taroom
Charleville
Meekatharra
Wiluna
Oodnadatta
BRISBANE
(232.8)
Laverton
350
Marree
Geraldton
Moree
Bourke
Grafton
Cook
Tarcoola
Kalgoorlie
Eucla
Ceduna
Tamworth
Port Augusta
Dubbo
PERTH
323.7
Wagin
Mildura
Newcastle
Esperance
(307.0)
ADELAIDE
SYDNEY (224.6)
Wollongong
CANBERRA
(251.0)
Albany
Horsham
Echuca
Cooma
MELBOURNE
Portland
Sale
(234.9)
Burnie
Launceston
Zeehan
275, 300
HOBART (239.5)

PLATE 11

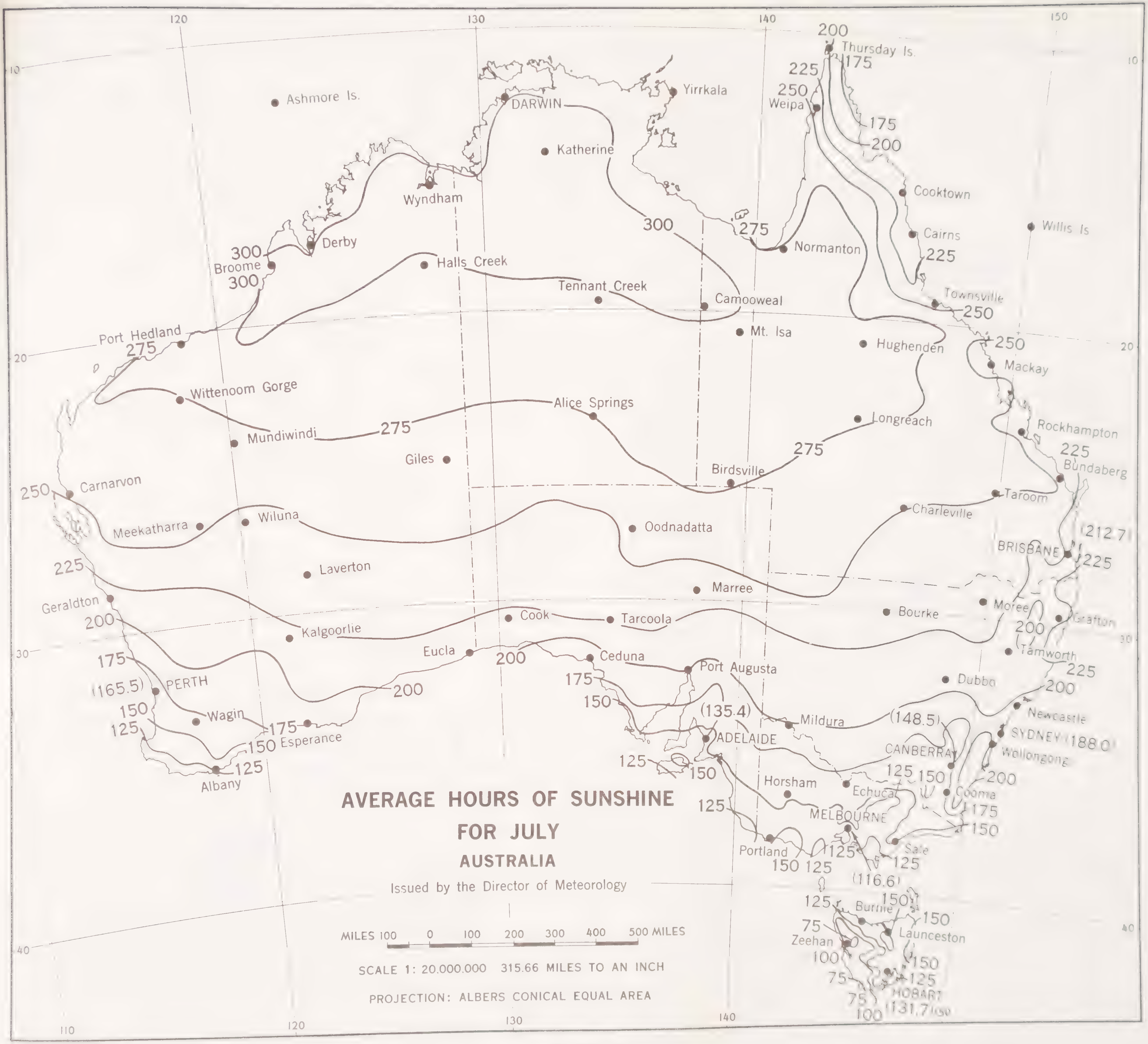

AVERAGE HOURS OF SUNSHINE
FOR JULY
AUSTRALIA
Issued by the Director of Meteorology
MILES 100 0 100 200 300 400 500 MILES
SCALE 1: 20.000.000 315.66 MILES TO AN INCH
PROJECTION: ALBERS CONICAL EQUAL AREA
110
120
130
140
150
10
20
30
40
Ashmore Is.
DARWIN
Yirrkala
Thursday Is.
Weipa
Katherine
Wyndham
Derby
Broome
Halls Creek
Tennant Creek
Camooweal
Normanton
Cooktown
Cairns
Willis Is
Townsville
Mt. Isa
Hughenden
Mackay
Port Hedland
Wittenoom Gorge
Mundiwindi
Alice Springs
Longreach
Rockhampton
Bundaberg
Giles
Birdsville
Carnarvon
Meekatharra
Wiluna
Oodnadatta
Charleville
Taroom
BRISBANE
(212.7)
Laverton
Marree
Geraldton
Kalgoorlie
Cook
Tarcoola
Bourke
Moree
Grafton
Tamworth
Eucla
Ceduna
Port Augusta
Dubbo
PERTH
(165.5)
Wagin
Esperance
Albany
(135.4)
ADELAIDE
Mildura
(148.5)
Newcastle
SYDNEY (188.0)
Wollongong
CANBERRA
Cooma
Horsham
Echuca
MELBOURNE
Sale
Portland
(116.6)
Burnie
Launceston
Zeehan
HOBART
(131.7)
300
275
250
225
200
175
150
125
100
75

PLATE 12

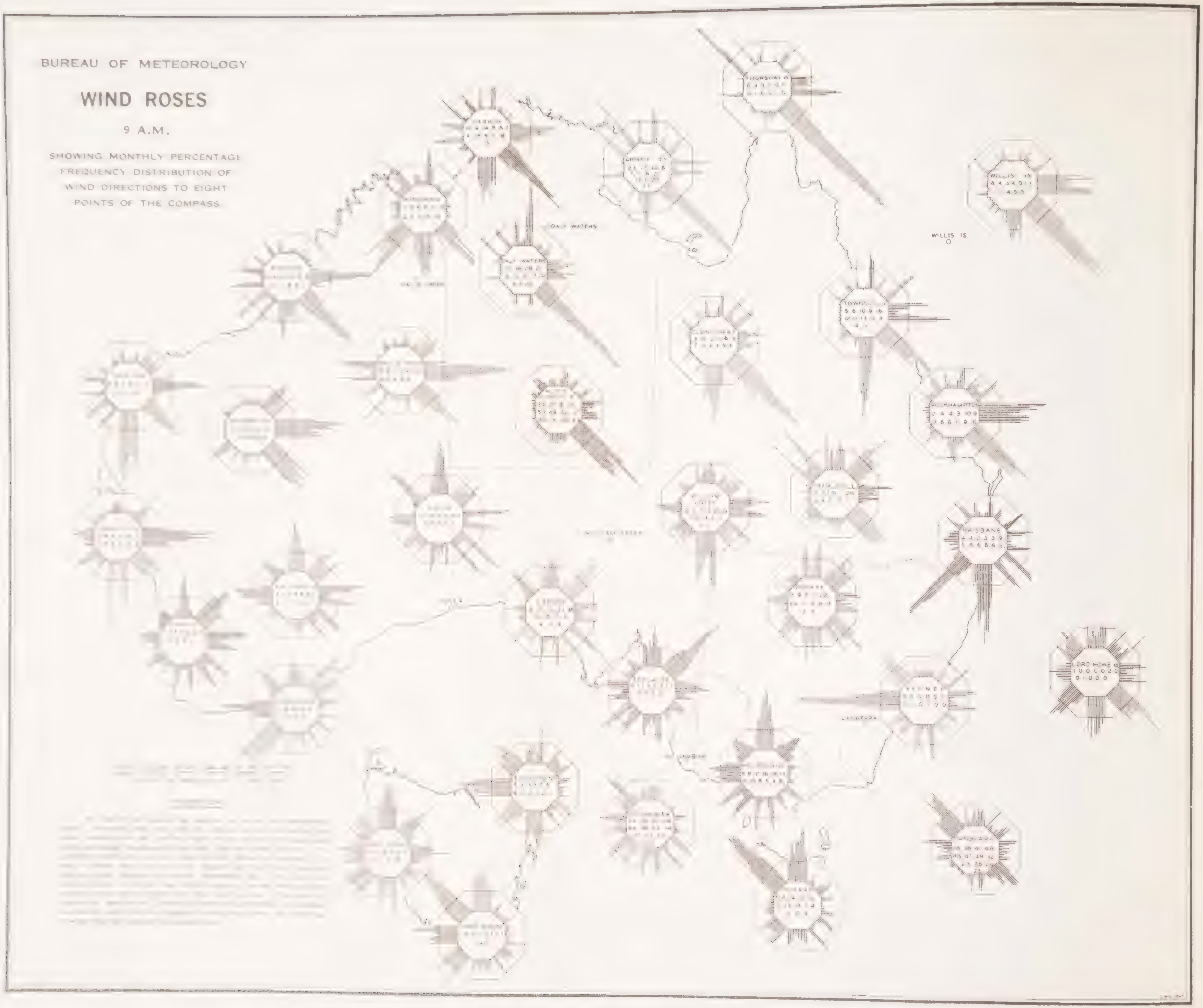
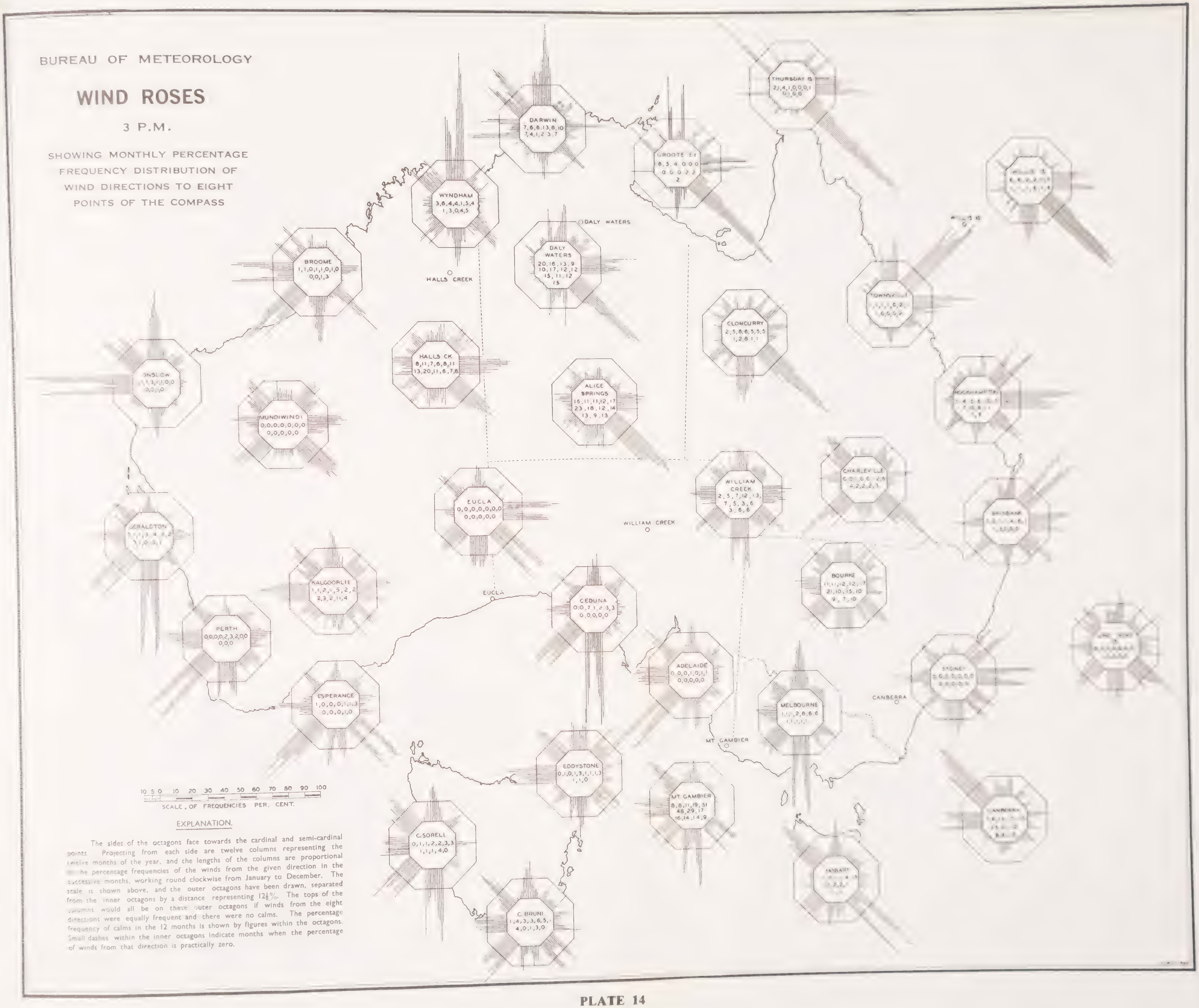

BUREAU OF METEOROLOGY
WIND ROSES
9 A.M.
SHOWING MONTHLY PERCENTAGE FREQUENCY DISTRIBUTION OF WIND DIRECTIONS TO EIGHT POINTS OF THE COMPASS
THURSDAY IS.
WILLIS IS.
WILLIS IS.
DALY WATERS
DALY WATERS
TOWNSVILLE
ROCKHAMPTON
BRISBANE
LORD HOWE IS.
CANBERRA

PLATE 13


THURSDAY IS
21,4,1,0,0,0,1
0,1,0,0
DARWIN
7,6,6,13,8,10
7,4,1,2 3,7
GROOTE EY
8,5,4 0 0 0
0 0 0 2 2
2
WYNDHAM
3,6,4,4,1,5,4
1,3,0,4,5
BROOME
1,1,0,1,1,0,1,0
0,0,1,3
HALLS CREEK
DALY WATERS
DALY
WATERS
20,16,13,9
10,17,12,12
15,11,12
15
TOWNSVILLE
CLONCURRY
2,5,8,6,5,5,5
1,2,8 1,1
ONSLOW
HALLS CK
8,11,7,6,8,11
13,20,11,6,7,8
ALICE
SPRINGS
16,11,11,12,17
23,18,12,14
13,9,13
MUNDIWINDI
0,0,0,0,0,0,0
0,0,0,0,0
CHARLEVILLE
4,2,2,2,3
WILLIAM
CREEK
2,5,7,12,13,
7,5,3,6
3,8,6
EUCLA
0,0,0,0,0,0,0
0,0,0,0,0
GERALDTON
WILLIAM CREEK
BOURKE
21,10,15,10
9,7,10
KALGOORLIE
1,1,2,1,5,2,2
2,3,2,11,4
EUCLA
CEDUNA
0,0,7,1,2,3,3
0,0,0,0,0
PERTH
0,0,0,0,2,3,2,0,0
0,0,0
ADELAIDE
0,0,0,1,0,1,1
0,0,0,0,0
SYDNEY
ESPERANCE
1,0,0,0,1,1,3
0,0,0,1,0
MELBOURNE
CANBERRA
MT GAMBIER
EDDYSTONE
0,1,0,1,3,1,1,1,3
1,1,0
MT GAMBIER
8,8,11,19,31
48,29,17
16,14,14,9
C. SORELL
0,1,1,2,2,3,3
1,1,1,4,0
HOBART
C. BRUNI
1,4,3,3,6,5,1
4,0,1,3,0
10 5 0 10 20 30 40 50 60 70 80 90 100

BUREAU OF METEOROLOGY

WIND ROSES

3 P.M.

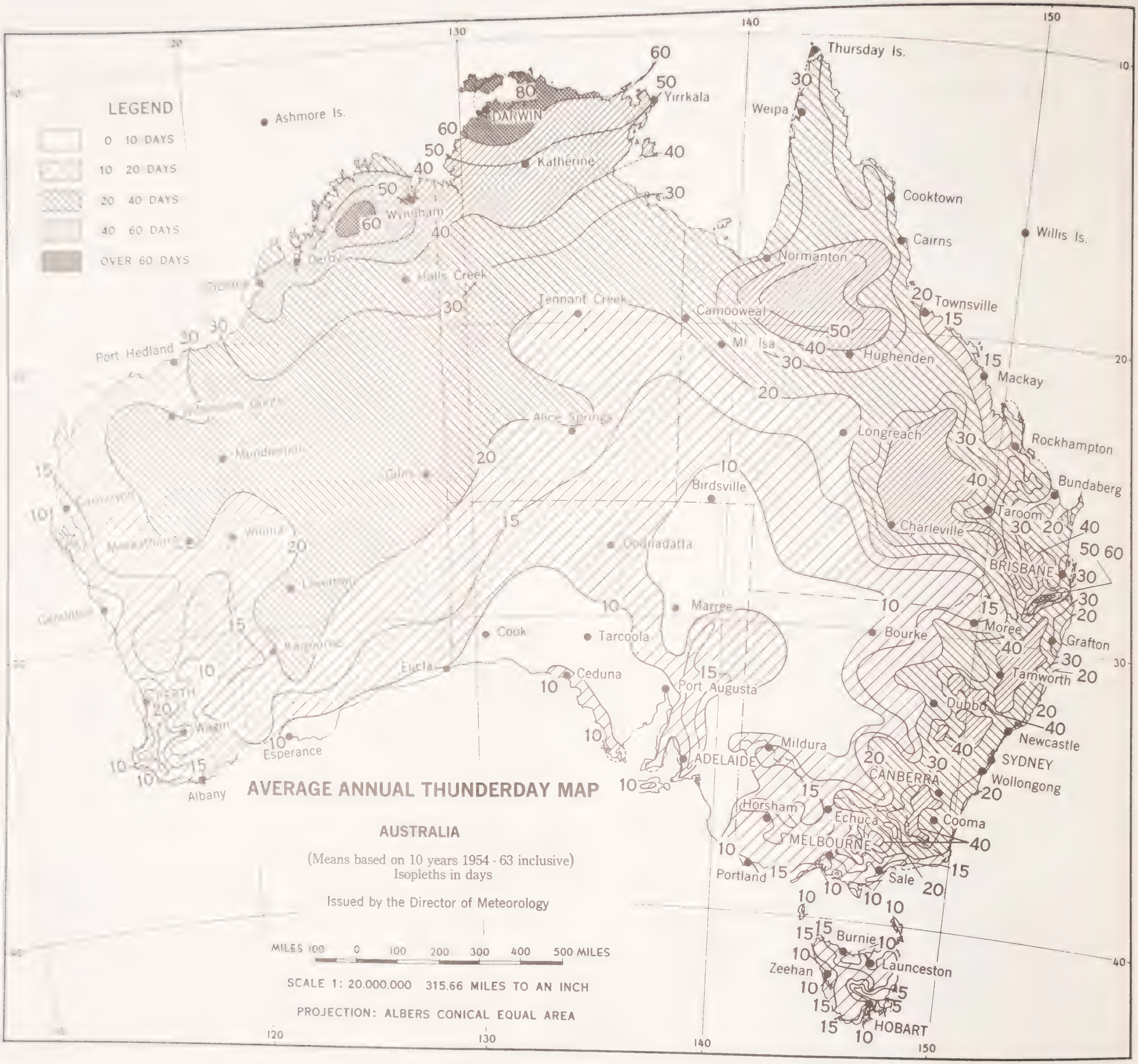
SHOWING MONTHLY PERCENTAGE FREQUENCY DISTRIBUTION OF WIND DIRECTIONS TO EIGHT POINTS OF THE COMPASS

SCALE, OF FREQUENCIES PER. CENT.

EXPLANATION.

The sides of the octagons face towards the cardinal and semi-cardinal points. Projecting from each side are twelve columns representing the twelve months of the year, and the lengths of the columns are proportional to the percentage frequencies of the winds from the given direction in the successive months, working round clockwise from January to December. The scale is shown above, and the outer octagons have been drawn, separated from the inner octagons by a distance representing 12½%. The tops of the columns would all be on these outer octagons if winds from the eight directions were equally frequent and there were no calms. The percentage frequency of calms in the 12 months is shown by figures within the octagons. Small dashes within the inner octagons indicate months when the percentage of winds from that direction is practically zero.

PLATE 14



AVERAGE ANNUAL THUNDERDAY MAP

AUSTRALIA

(Means based on 10 years 1954 - 63 inclusive)
Isopleths in days

Issued by the Director of Meteorology

LEGEND
0 10 DAYS
10 20 DAYS
20 40 DAYS
40 60 DAYS
OVER 60 DAYS
MILES 100 0 100 200 300 400 500 MILES
SCALE 1: 20.000.000 315.66 MILES TO AN INCH
PROJECTION: ALBERS CONICAL EQUAL AREA
120
130
140
150
10
20
30
40
Thursday Is.
Weipa
Yirrkala
DARWIN
Katherine
Ashmore Is.
Wyndham
Derby
Halls Creek
Broome
Port Hedland
Tennant Creek
Camooweal
Mt. Isa
Normanton
Cooktown
Cairns
Willis Is.
Townsville
Hughenden
Mackay
Alice Springs
Longreach
Rockhampton
Bundaberg
Taroom
Charleville
Birdsville
Giles
Carnarvon
Meekatharra
Wiluna
Oodnadatta
Marree
BRISBANE
Moree
Grafton
Bourke
Tamworth
Laverton
Geraldton
Kalgoorlie
Cook
Tarcoola
Eucla
Ceduna
Port Augusta
PERTH
Wagin
Esperance
Albany
Dubbo
Newcastle
SYDNEY
Wollongong
CANBERRA
Mildura
ADELAIDE
Horsham
Echuca
Cooma
MELBOURNE
Portland
Sale
Burnie
Launceston
Zeehan
HOBART
80
60
50
40
30
20
15
10

PLATE 15

of New South Wales. The chief rivers in this area are the Tweed, Richmond, Clarence, McLeay, Nepean, Hawkesbury, Hunter, and Shoalhaven, all of which experience quite frequent and considerable flooding. These floods occur chiefly in summer but may occur at any time of the year.

The great Fitzroy and Burdekin river systems in Queensland are also subject to floods during the summer wet season, while much of the heavy monsoon rain in northern Queensland flows southward through the normally dry channels of the network of rivers draining into Lake Eyre. This water may cause extensive floods over a vast area, but it is soon lost by seepage and evaporation and rarely reaches the lake in any quantity. The Condamine and the other tributaries of the Darling also carry considerable volumes of water south through western New South Wales to the Murray, and flooding along their courses occurs from time to time.

Flooding also occurs from time to time, usually in autumn, winter, and spring, in the Murray-Murrumbidgee system of New South Wales and Victoria and on the smaller coastal streams of southern Victoria. In Tasmania, flooding of the north coast streams, particularly the South Esk system, is common in the same seasons. In South Australia some flooding has occurred in the lower reaches of the Murray owing to rainfall as far away as Queensland and south-eastern New South Wales. In the north of Western Australia and the Northern Territory, flooding of the coastal streams occurs frequently in summer but is not of such economic importance as the flooding of the eastern coastal streams of the continent, where many localities are more vulnerable to damage.

Temperature

Conditions vary greatly for a particular individual even in a fixed location, so that it is difficult to describe general comfort variability uniquely throughout a region as varied climatically as Australia. A number of indexes which attempt to incorporate some of the factors concerned* have been used experimentally from time to time, and further research continues on this very difficult problem. Generally speaking, there is an increase in discomfort northwards within the tropical regions of Australia in summer, owing to the heat and high absolute humidity which reach a maximum in the extreme north of the continent. Such conditions are, however, ameliorated to a large extent in highland areas such as the Atherton Tableland in Queensland. No part of Australia is uncomfortably hot in winter, and only in a small area of the Australian Alps and highland Tasmania does bodily strain due to cold exist in winter. The history of the settlement of the northern regions of Queensland and the Northern Territory indicates that with accelerating development of studies and experience in the arrangement of living and working accommodation, clothing, and general way of life, the effects of extremes of climate can be minimised.

For some further discussion of the problems of temperature and comfort conditions reference may be made to Ashton, H. T., *Meteorological Data for Air Conditioning in Australia*, Bureau of Meteorology Bulletin No. 47 (1964).

Average seasonal temperature distribution. Plates 5 to 8 show the normal daily maximum and minimum temperatures for January and July, which may be taken as indicative respectively of the summer and winter seasons in Australia. Further detailed temperature data are presented on pages 39–48 for the capital cities and more important country towns of the Commonwealth.

On the basis of average annual mean temperatures, and latitude for latitude, Australia is somewhat cooler than the other land masses of the southern hemisphere and considerably cooler than the same latitudes in the large continental areas of the northern hemisphere. This is due to the insular nature of Australia and the stronger general circulation of the atmosphere in the southern hemisphere resulting in the transport of higher latitude (cooler) air into the subtropical regions.

July is the month with the lowest mean temperature in all parts of the continent, while the month with the highest mean temperature varies from February in Tasmania and southern Victoria to December in the northern part of the continent and November in Darwin. The lateness of the month of highest average temperature in the extreme south of the continent is due in part to the effect of the Southern Ocean, where the sea surface temperature reaches its maximum in February. The cooler period of the late summer in the north is due largely to increased cloudiness associated with the inflow of north-west winds with the onset of the monsoon season.

In January average maximum temperatures exceed 95° F. over a vast area of the interior of the continent, and over large areas exceed 100° F. The hottest part of Australia is situated in the north of Western Australia around the Marble Bar and Nullagine area, where the daily maximum screen temperature during the summer frequently exceeds 100° F. for weeks at a time.

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* *See* Year Book No. 53, page 35.

The marked change of maximum temperature in summer with distance from the sea, in areas close to the coasts, particularly along the Great Australian Bight and the Indian Ocean coast of Western Australia, is due to the penetration inland of the vigorous sea breezes which are initiated by the considerable temperature contrast between land and sea surface temperatures. The 75° F. isotherm of January mean maximum temperature skirts the southern coast of the continent from south-western Western Australia to Gippsland.

In January the mean minimum temperatures in the tropics, except for some highland regions, exceed 72° F., with a gradual decrease southward to values of 55° F. in Victoria and 50° F. in Tasmania. Highland regions in the south have mean values of 45° F. and lower. In July a more regular latitudinal distribution of mean maximum temperature is evident, only the extreme north of the continent having mean maxima higher than 80° F. Values lower than 60° F. are general over the south-eastern part of the continent, with mean maxima falling below 40° F. in small alpine areas. Average night minimum temperatures in July fall below 45° F. in areas south of the tropics and away from the coast. Alpine regions again record the lowest temperatures with some areas experiencing means lower than 25° F.

Extreme variation and daily range. Only at a few inland places in Australia does the absolute range of temperature (i.e. the range from the highest maximum to the lowest minimum) exceed 100° F. Generally it is in the range 70° F. to 90° F. in the inland areas and somewhat less on the coasts. The highest temperature recorded in Australia was 127.5° F. at Cloncurry (Queensland) on 16 January 1889 and the lowest −8° F. at Charlotte Pass in the southern Alps on 14 July 1945 and again on 22 August 1947. The world record maximum temperature is 136° F. at Azizia (Tripoli) on 13 August 1922 and the world record minimum temperature −126.9° F. at Vostok on the Antarctic plateau on 24 August 1960.

High temperatures. Heat waves with a number of successive days higher than 100° F. are relatively common in many parts of Australia. With the exception of the north-western coast of Western Australia, however, most coastal areas do not usually experience more than a few days in succession of such conditions. The frequency of such conditions increases inland, and periods of up to twenty days have been recorded over most of the settled areas. This figure increases in western Queensland and north-western Western Australia to more than sixty days in places. The central part of the Northern Territory and the Marble Bar-Nullagine area of Western Australia have recorded the most prolonged heat waves for the Australian region. The longest consecutive period of daily maxima greater than 100° F. was 160 consecutive days recorded in Marble Bar during the summer of 1923–24.

Frosts. Injury to the tissues of growing plants is not caused until the temperature has fallen considerably below the freezing point of water (32° F.), and a ground frost is regarded as having occurred when the grass thermometer has fallen below 30.4° F. However, as terrestrial minima are not recorded at all stations, it is usual for statistical purposes to regard the registration of a screen thermometer of 36° F. as indicating a 'light' frost. A map showing frequency of days with screen minima higher than 36° F. (i.e. the frost free period) is reproduced in plate 9. A 'heavy' frost is taken as a screen reading of less than 32° F. A 'black' frost occurs with a combination of low temperature and low humidity, and, although frost crystals are not observed on the ground, damage takes place to the plant cells by the freezing and expansion of the moisture they contain.

The frequency of frost depends largely on altitude, latitude, and proximity to the sea, and locally, to a very large extent, on even minor variations in contour of the land. The parts of Australia which are most subject to frost are the eastern highlands from north-eastern Victoria to the western Darling Downs in southern Queensland. Most stations in this region experience more than ten nights a month with readings of 32° F. or under for three to five months of the year. On Tasmania's Central Plateau similar conditions occur for three to six months of the year. Heavy frosts are comparatively infrequent in Western Australia, except in parts of the south and south-west. In South Australia frosts are most frequent in the agricultural areas of the south-east.

Frosts may occur within a few miles of the coast over the whole continent except the Northern Territory and most of north Queensland. Regions in which frosts may occur at any time of the year comprise most of Tasmania, large areas of the tablelands of New South Wales, much of inland Victoria, particularly the north-east, and a small part in the extreme south-west of Western Australia. Over most of the interior of the continent, and on the highlands of Queensland as far north as the Atherton Plateau, frosts commence in April and end in September, but they are infrequent in these months. Minimum temperatures below 32° F. are experienced in most of the sub-tropical interior in June and July.

For further details of frost conditions in Australia reference should be made to Foley, J. C., *Frost in the Australian Region*, Bureau of Meteorology Bulletin No. 32 (1945).

Humidity and saturation deficit

The annual variation of vapour pressure* for regions outside the tropics closely follows that of temperature. However, the mean relative humidity* in the temperate regions is generally highest in winter and lowest during the summer. In northern Australia the highest relative humidity occurs during the rainy summer season. The relative humidity variation during the day closely follows the diurnal variation of temperature, being highest with low temperatures and lowest with high temperatures. The relative humidity at 9 a.m. for Australian conditions may be considered as a close approximation to the mean for the whole day. In the tables for the capital cities, pages 39–46, the mean monthly vapour pressure and relative humidity for 9 a.m., together with the monthly extremes, are listed. The order of the stations in descending values of mean annual vapour pressure at 9 a.m. is Darwin, Brisbane, Sydney, Perth, Melbourne, Adelaide, Canberra, and Hobart, while the annual mean of the 9 a.m. relative humidities diminishes in the order Darwin, Sydney, Canberra, Melbourne, Brisbane, Hobart, Perth, and Adelaide.

In January the mean saturation deficit* at the mean temperature for the month has a maximum value of over 0.90 inches in the central parts of Western Australia and in south-eastern Queensland. Gradual decreases occur towards the coast, where values close to the north, east, and south coastlines are around 0.20 inches. On the western coast values are somewhat higher, and a strong gradient exists in the saturation deficit in the narrow region bordering the Indian Ocean. In July the variation is less, with maxima of 0.40 inches in the dry north of the Northern Territory and Western Australia, slowly decreasing generally to the south, with values over most of the south-east and extreme south-west of the continent being less than 0.10 inches. Extremely low values (less than 0.025 inches) exist in July over the highlands of south-eastern Australia and Tasmania.

Evaporation

In Australia the study of evaporation is of great importance, since in its drier regions water conservation must be practised by the use of tanks and dams. The magnitude of the economic loss by evaporation may be appreciated from plate 10, which shows that the yearly amount varies from 20 inches over the highland areas of central Tasmania to more than 130 inches in the northern and north-western part of South Australia.

Over an area of some 70 per cent of the continent, comprising most inland districts and extending to the coast in the north-west of Western Australia and to the head of the Great Australian Bight, the rainfall does not exceed the evaporation loss in any month of the year. The central and north-western portions of the continent experience evaporation far in excess of their rainfall. Vegetation over these areas is characterised by acacia, scrub steppe, and arid scrub, while many areas are merely sand hills and stony desert. Over many of the drier areas, however, particularly in the inland areas of south-eastern Australia, the loss of rainfall by evaporation is made good to some extent by the development of irrigation schemes. Some of these schemes, such as those at the Murrumbidgee Irrigation Area in New South Wales and at Mildura in Victoria and Renmark in South Australia, have been very successful. The Snowy Mountains Hydro-electric Scheme has also resulted in the large scale supply of water from the south-eastern highlands of Australia for use in the drier areas to the west of the ranges in New South Wales and Victoria. The future development of such schemes as these holds promise for the reclamation of many marginal areas in Australia, which because of low rainfall and high evaporation are at present of little economic value.

Since the loss by evaporation depends largely on the net radiation absorbed and consequently on the extent of the exposed area, tanks and dams so designed that the surface area shall be a minimum are advantageous. Further, the more protected they are from the direct rays of the sun and from winds by means of suitable tree planting the less will be the evaporation loss. The Mansfield process for the treatment of tanks and dams by a mono-molecular chemical film which materially reduces evaporation is a recent development which is already giving beneficial results, particularly on large water storage areas. Such improvements are of considerable importance to the pastoralists of the drier regions of Australia and to water supply authorities.

Further information on evaporation may be found in Hounam, C. E., *Evaporation in Australia*, Bureau of Meteorology Bulletin No. 44 (1961).

Sunshine and cloud

The proportion of the sky covered by cloud is of considerable meteorological and climatological importance. A cloud cover inhibits both incoming and outgoing radiation and thus profoundly affects the temperature distribution and other factors at the earth's surface. Cloud amount is measured in eighths of the sky covered.

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* *Vapour pressure*—the pressure exerted by the water vapour of the atmosphere; *relative humidity*—the ratio of the existing vapour pressure to the saturated vapour pressure at the existing temperature, expressed as a percentage; *saturation deficit*—the difference between the saturation vapour pressure and the actual vapour pressure. *See* Year Book No. 53, page 37 for further information.

In Australia the seasonal changes in cloudiness correspond closely to that of rainfall. In the southern or more temperate parts of the continent, particularly in the coastal and low lying areas, the winter months are generally more cloudy than the summer. This is due to the formation of extensive areas of stratiform cloud and fog during the colder months, when the structure of the lower layers of the atmosphere favours the physical processes resulting in this type of cloud. A particularly strong annual periodicity exists in the monsoonal regions of northern Australia, where it is heavily clouded during the summer wet season and practically cloudless during the winter 'dry'. Cloudiness is higher near coasts and on the windward slopes of the mountains of eastern Australia and is least over the dry interior parts of the continent.

A close relationship exists between cloud amount and number of sunshine hours, and it is possible to estimate from cloud data the equivalent number of sunshine hours over a given period. These data can be incorporated with records of direct measurement of sunshine hours, and approximate distribution maps produced for Australia. Maps of the mean sunshine distribution for January and July are reproduced in plates 11 and 12 and indicate the main features of the variation over Australia in these months.

Except for Tasmania and a narrow fringe bordering the southern, eastern, and northern coasts, the greater part of the continent receives more than 3,000 hours of sunshine each year, and in Central Australia and the mid-western coast of Western Australia totals in excess of 3,500 hours occur. The extreme south coast receives in the main 2,000 to 2,500 hours annually, while the east coast regions of New South Wales and Queensland receive 2,500 to 3,000 hours. A minimum of less than 1,750 hours occurs on the west coast and highlands of Tasmania.

Mean amounts of cloud for each month at the capital cities are included in the tables on pages 39–46, as are the mean daily hours of sunshine. The latter figure is a good single measure of the relative climatic characteristics of the individual cities for different months of the year.

Wind

Australia lies in those latitudes of the southern hemisphere where it is influenced largely by two wind systems:

(*a*) the south-east trade winds blowing on the equatorial side of the mid-latitude anticyclones; and

(*b*) the westerlies south of the mid-latitude anticyclones in which successive low pressure systems move eastward over the Southern Ocean.

The only pronounced seasonal variations of atmospheric pressure in the middle and high latitudes of the southern hemisphere are related to the latitudinal shift in the axes of the sub-tropical high pressure systems and to the change in the tracks of the migratory anticyclones. The latter systems move generally from west to east in the Australian region between the semi-permanent oceanic anticyclones of the Indian and Pacific Oceans. The mean path of these systems lies over southern Australia during the summer but moves northwards during the winter with the thermal equator. The movement is only of a few degrees of latitude but it is of very great importance to the climate of the Australian continent. During the summer months, when the anti-cyclones move on a more southerly track, the south-east trades affect the whole coast of eastern Australia north of around latitude 30° S., the westerlies retreating to higher latitudes, and conditions are more settled over southern Australia which then lies close to the axis of the anticyclones. In winter the anticyclones move further north, the trades affect only the northern parts of the continent, and southern Australia is exposed to the westerlies of the Southern Ocean.

In summer, with the retreat of the anticyclones to the south, the whole of northern and north-western Australia is exposed initially to light wind systems, and then during the period from December to April to the effects of the north-west monsoon. This process, which is associated with an inflow of north-west winds and intensive rains, is not as regular or persistent as the south-west monsoon of south-east Asia. However, it is a sufficiently regular feature of the climate of northern Australia to be designated as the north-west season, or, as it is best known in the area, 'the wet'. Its influence affects areas as far south as central Queensland, but southern Queensland and the area east of the Great Dividing Range are largely still under the influence of the south-east trades. Fringe or marginal areas on the southern limits of the monsoonal penetration over the continent have a shorter and more uncertain 'wet' season, which in some years fails to appear at all. With the northward advance of the anticyclones in autumn, the monsoon gives way again to the trades, and 'the dry' of northern and north-western Australia commences.

The general features of these wind patterns may be seen in the wind rose diagrams of plates 13 and 14. It is important, however, to note the dynamic nature of the atmosphere, and that the continual growth, decay, and motion of the pressure systems result in a wide diversity of wind-flow types. Descriptions of wind conditions for particular geographical areas and seasons can thus be only of a very generalised kind. Further, local features can also be imposed on the overall wind pattern—channelling of winds due to topography (e.g. the high frequency of north-west winds in Hobart) and the marked summer sea breeze characteristics of most of the Australian coast, particularly near the Great Australian Bight as shown in the diagrams of 3 p.m. wind frequencies.

Storms and tropical cyclones

In general there are two types of weather systems in Australia which produce very strong winds and heavy rainfalls over large areas of the continent:

(*a*) the active depressions which move westwards over the Southern Ocean; and

(*b*) the tropical cyclones or hurricanes of north-eastern and north-western Australia.

During the winter the southern shores of the continent are subject to the deep depressions of the southern low pressure belt. They are felt most severely over the south-west of Western Australia, the south-east of South Australia, southern Victoria, and Tasmania, and may move inland in all these regions bringing strong winds and heavy rainfall. Further extensions of this type of system frequently develop close to the coast of New South Wales, often bringing severe weather to this region and to southern Queensland. These are generally known as 'east coast lows'.

The frontal systems (i.e. the narrow zones characterised by cloud and bad weather separating two air masses of different density) which are associated with these depressions vary widely in character. A common type in south-east Australia is a cold front located in a ∧ shaped trough. Such a system usually brings very strong north to north-west winds in advance of the front with a very abrupt backing of the wind to colder west to south-westerly winds after the frontal passage. Such frontal passages are, in their most severe form, associated with thunderstorms and line squalls, heavy rain, and a change to cold winds and showers. These violent changes with the passage of a cold front and strong southerly winds frequently affect the New South Wales coast as far north as Newcastle during the winter, and are popularly known as 'southerly busters'.

The most extensive rains of inland Australia occur when moist tropical air which has moved inland is lifted by convergence ahead of a slow moving colder air mass moving from the southern Ocean. The coast of Queensland, particularly the section from Cooktown to Mackay and the adjacent waters, is subject to visitations by tropical cyclones (the 'hurricanes' of the Caribbean and 'typhoons' of the China Sea). These destructive systems can affect this region from December to April, normally forming in the Coral Sea, moving south-west close to the coast and then passing away to the south-east into the Pacific. They may, however, cross the coast from time to time and bring torrential rain and violent winds (often more than 100 mph) to the coastal regions.

Similar systems affect the north-west coast of Western Australia where they bear the local name of 'willy willies', a name which is, however, often used generally in Australia for minor local whirlwinds or dust devils. The season in this region generally lasts from November to April, the storms originating in the Timor or Arafura Seas travelling usually south-west and approaching the coast most commonly between latitudes 20° S. and 22° S. Thence the systems may move southwards following the coast, or sometimes cross inland bringing high rainfalls to the otherwise dry interior of the continent. A further region which is affected somewhat less frequently by tropical cyclones is the coast of Arnhem Land in the Northern Territory and the waters and coasts of the Gulf of Carpentaria.

Tropical cyclones, in general, soon lose their intensity on crossing from sea to land, but, although the wind force rapidly abates, they are still capable of producing the heavy rainfall which leads to flooding of coastal rivers, damage to stock and property, and general disruption of transport.

Thunderstorms which bring local heavy rain and strong winds are common to most of Australia. They are also of particular importance because of the lightning damage which they cause to power transmission lines, and have been extensively studied for the purpose of siting electrical installations as far as possible in areas of low thunderstorm occurrence. Plate 15 shows the number of days annually on which thunder is heard, which is a better observational criterion than lightning observed. The region of maximum thunderstorm activity is the extreme north-west of the continent and the region south-east of the Gulf of Carpentaria. In the more settled areas maximum thunderstorm occurrence is in central western and south-eastern Queensland and the highland areas of New South Wales. The minimum number of storms occur over the interior of South Australia, western New South Wales, and eastern Tasmania.

Climatological tables

The averages and extremes for a number of elements which have been determined from long series of observations at the Australian capitals up to and including the year 1967 (data for Canberra up to 1968) are given in the following pages, together with more limited data for the larger country towns of the Commonwealth.

Barometric and vapour pressure data, which were expressed in inches of mercury in years before 1966, are now expressed in millibars (1 millibar=0.02953 inches of mercury).

The data for Canberra show the number of days of thunder; the other tables show the number of days of lightning.

The following points apply, except where otherwise stated. Where records are available, prevailing winds have been determined over a standard period of thirty years from 1911 to 1940. Other averages and extremes, including evaporation, temperature, and rainfall records for which thirty years normals have been published for a number of years past, have, since 1965, been extracted from all available years of actual record, but the number of years quoted does not include intervening periods when observations were temporarily discontinued.

CLIMATOLOGICAL DATA: PERTH, WESTERN AUSTRALIA

(Lat. 31° 57′ S., Long. 115° 51′ E. Height above M.S.L. 210 ft)

BAROMETER, WIND, EVAPORATION, LIGHTNING, CLOUDS, AND CLEAR DAYS

Month	*Bar. corrected to 32° F. mn sea level and standard gravity from 9 a.m. and 3 p.m. readings (m.bars)*	*Wind (height of anemometer 71 ft)*					*Mean emt evaporation (in)*	*No. days lightning*	*Mean amt clouds 9 a.m., 3 p.m., 9 p.m. (a)*	*No. clear days*
		Average miles per hour	*Highest mean speed in one day (mph)*	*Highest gust speed (mph)*	*Prevailing direction 9 a.m.*	*Prevailing direction 3 p.m.*				
No. of years of observations	83	30(*b*)	70	55	30(*b*)	30(*b*)	69	71	30(*b*)	30(*b*)
January	1,012.6	10.9	26.3 *27/98*	50	E	SSW	10.36	2	2.3	14
February	1,013.0	10.7	21.5 6/08	54	ENE	SSW	8.76	2	2.5	13
March	1,015.2	10.1	21.5 6/13	70	E	SSW	7.63	2	2.8	12
April	1,017.9	8.5	31.5 25/00	63	ENE	SSW	4.66	1	3.4	9
May	1,017.9	8.4	27.3 29/32	74	NE	WSW	2.79	3	4.3	6
June	1,017.7	8.4	30.2 17/27	80	N	NW	1.86	2	4.7	5
July	1,018.8	8.8	33.5 20/26	85	NNE	W	1.79	2	4.5	5
August	1,018.7	9.4	31.9 15/03	97	N	WNW	2.44	1	4.5	6
September	1,018.3	9.4	28.5 11/05	68	ENE	SSW	3.52	1	3.9	8
October	1,016.9	10.0	26.7 6/16	65	SE	SW	5.42	1	3.8	8
November	1,015.5	10.7	25.7 *18/97*	63	E	SW	7.59	1	3.1	9
December	1,013.4	11.0	25.6 6/22	64	E	SSW	9.67	2	2.6	13
Year Totals	..	..	.. ..	..	..	..	66.49	20	..	108
Year Averages	1,016.3	9.7	.. ..	..	E	SSW	..	..	3.5	..
Year Extremes	..	..	33.5 20/7/26	97	..	..	..	..	..	..

(*a*) Scale 0–8. (*b*) Standard thirty years normal (1911–1940).

TEMPERATURE AND SUNSHINE

Month	*Mean temperature (°Fahr.)*			*Extreme shade temperature (°Fahr.)*		*Extreme temperature (°Fahr.)*		*Mean daily hours sunshine*
	Mean max.	*Mean min.*	*Mean*	*Highest*	*Lowest*	*Highest in sun*	*Lowest on grass*	
No. of years of observations	71	71	71	71	71	63(*a*)	69	70
January	85.1	63.6	74.3	110.7 29/56	48.6 20/25	177.3 22/14	39.5 20/25	10.4
February	85.5	63.8	74.6	112.2 8/33	47.7 1/02	173.7 4/34	39.8 1/13	9.9
March	81.8	61.6	71.7	106.4 14/22	45.8 8/03	167.0 19/18	36.7 (*b*)	8.8
April	76.1	57.3	66.7	99.7 9/10	39.3 20/14	157.0 8/16	30.8 26/60	7.2
May	69.1	52.7	60.9	90.4 2/07	34.3 11/14	146.0 4/25	25.0 31/64	5.8
June	64.4	49.8	57.1	81.7 2/14	34.9 22/55	135.5 9/14	25.9 27/46	4.8
July	62.9	47.9	55.4	76.4 21/21	34.2 7/16	133.2 13/15	25.1 30/20	5.2
August	64.1	48.2	56.1	82.0 21/40	35.4 31/08	145.1 29/21	26.6 18/66	6.1
September	66.8	50.1	58.4	90.9 30/18	36.7 6/56	153.6 29/16	27.2 (*c*)	7.1
October	69.9	52.4	61.1	99.1 29/67	40.0 16/31	161.2 19/54	29.8 16/31	8.1
November	76.1	56.8	66.4	104.6 24/13	42.0 1/04	167.0 30/25	35.0 3/47	9.6
December	81.1	60.8	70.9	107.9 20/04	47.5 29/57	168.8 11/27	38.0 29/57	10.4
Year Averages	73.6	55.4	64.5	.. ..	.. ..	.. ..	.. ..	7.8
Year Extremes	..	..	..	112.2 8/2/33	34.2 7/7/16	177.3 22/1/14	25.0 31/5/64	..

(*a*) Records discontinued 1963. (*b*) 8/1903 and 16/1967. (*c*) 8/1952 and 6/1956.

HUMIDITY, RAINFALL, AND FOG

Month	*Vapour pressure mean 9 a.m. (m.bars)*	*Rel. hum. (%) at 9 a.m.*			*Rainfall (inches)*					*Fog Mean No. days*
		Mean	*Highest mean*	*Lowest mean*	*Mean mthly*	*Mean No. of days of rain*	*Greatest monthly*	*Least monthly*	*Greatest in one day*	
No. of years of observations	30(*a*)	30(*a*)	71	71	92	92	92	92	92	71
January	14.8	51	63	41	0.32	3	2.17 1879	Nil (*b*)	1.74 *27/79*	0
February	14.7	51	65	43	0.43	3	6.55 1955	Nil (*b*)	3.43 17/55	0
March	14.7	57	66	46	0.79	4	5.71 1934	Nil (*b*)	3.03 9/34	1
April	13.4	61	75	51	1.80	8	5.85 1926	Nil 1920	2.62 30/04	1
May	12.4	70	81	61	4.99	14	12.13 1879	0.77 1949	3.00 17/42	1
June	11.4	75	85	68	7.34	17	18.75 1945	2.16 1877	3.90 10/20	2
July	10.9	76	88	69	6.90	18	16.73 1958	2.42 1876	3.00 *4/91*	1
August	10.7	71	83	62	5.56	18	12.53 1945	0.46 1902	2.91 14/45	1
September	11.6	66	75	58	3.16	14	7.84 1923	0.34 1916	1.86 18/66	0
October	11.7	60	75	52	2.18	12	7.87 1890	0.15 1946	1.97 4/67	0
November	12.7	52	66	41	0.83	6	2.78 1916	Nil 1891	1.54 29/56	0
December	13.9	51	63	39	0.59	4	3.17 1951	Nil (*b*)	1.84 3/51	0
Year Totals	..	..	..	..	34.89	121	.. ..	.. ..	.. ..	7
Year Averages	12.7	62	..	..	..	..	.. ..	.. ..	.. ..	..
Year Extremes	..	..	88	39	..	..	18.75 6/1945	Nil (*c*)	3.90 10/6/20	..

(*a*) Standard thirty years normal (1911–1940). (*b*) Various years. (*c*) November to April, various years.

Figures such as *27/98*, 29/56, etc. indicate, in respect of the month of reference, the day and year of the occurrence. Dates in italics relate to nineteenth century.

CLIMATOLOGICAL DATA: DARWIN, NORTHERN TERRITORY

(Lat. 12° 28′ S., Long. 130° 51′ E. Height above M.S.L. 97 ft)

BAROMETER, WIND, EVAPORATION, LIGHTNING, CLOUDS, AND CLEAR DAYS

Month	*Bar. corrected to 32° F. mn sea level and standard gravity from 9 a.m. and 3 p.m. readings (m.bars)*	*Wind*					*Mean amt evaporation (in)*	*No. days lightning*	*Mean amt clouds 9 a.m., 3 p.m., 9 p.m. (a)*	*No. clear days*
		Average miles per hour	*Highest mean speed in one day (mph)*	*Highest gust speed (mph)*	*Prevailing direction*					
					9 a.m.	*3 p.m.*				
No of years of observations	85	15	..	16(*b*)	..	..	9	30	30	30
January	1,006.1	6.1	..	66	NW & S	W & NW	6.04	16	5.7	1
February	1,006.3	6.7	..	63	W & S	W & NW	5.61	16	5.6	1
March	1,007.2	5.3	..	98	SE	W & NW	6.14	14	5.0	3
April	1,009.2	6.1	..	42	SE	E	6.49	6	2.8	11
May	1,010.9	6.5	..	39	SE	E	7.27	1	1.7	19
June	1,012.2	6.5	..	40	SE	E & SE	6.97	0	1.3	22
July	1,012.7	6.2	..	39	SE	E & SE	7.05	0	1.1	23
August	1,012.6	5.9	..	45	SE	NW & N	7.73	0	1.0	23
September	1,011.7	6.2	..	40	SE & S	NW & N	8.07	1	1.6	18
October	1,010.5	6.2	..	53	S	NW & N	9.17	8	2.6	10
November	1,008.7	5.5	..	73	W & S	NW & N	8.20	17	3.8	4
December	1,006.9	6.2	..	66	NW & S	NW & N	7.18	17	4.8	2
Year: Totals	..	..	..	..	..	..	85.92	96	..	137
Year: Averages	1,009.6	6.1	..	..	SE	NW	..	..	3.1	..
Year: Extremes	..	..	..	98	..	..	..	..	..	..

(*a*) Scale 0–8. (*b*) Several incomplete years.

TEMPERATURE AND SUNSHINE

Month	*Mean temperature (°Fahr.)*			*Extreme shade temperature (°Fahr.)*		*Extreme temperature (°Fahr.)*		*Mean daily hours sunshine*
	Mean max.	*Mean min.*	*Mean*	*Highest*	*Lowest*	*Highest in sun*	*Lowest on grass*	
No. of years of observations	85	85	85	85(*a*)	85(*a*)	25(*b*)	..	15
January	89.9	77.0	83.5	100.0 *2/82*	68.0 *20/92*	168.0 26/42	..	5.8
February	89.5	76.6	83.1	100.9 *20/87*	63.0 25/49	163.6 (*c*)	..	6.2
March	90.4	76.6	83.5	102.0 (*d*)	66.6 31/45	165.6 23/38	..	6.9
April	91.7	75.5	83.6	104.0 *7/83*	60.8 11/43	163.0 1/38	..	8.3
May	90.2	72.2	81.2	102.3 *8/84*	57.5 28/67	160.0 5/20	..	9.5
June	87.7	68.9	78.3	98.6 17/37	53.8 23/63	155.2 2/16	..	9.8
July	86.9	67.2	77.1	98.0 *17/88*	50.7 29/42	156.0 28/17	..	9.8
August	88.7	69.3	79.0	98.0 19/00	56.4 11/63	156.2 28/16	..	10.4
September	90.9	73.6	82.3	102.0 *20/82*	62.1 9/63	157.0 (*e*)	..	9.9
October	92.6	77.0	84.8	104.8 *17/92*	66.9 8/66	160.5 30/38	..	9.5
November	92.9	77.6	85.3	103.3 *9/84*	66.8 4/50	170.4 14/37	..	8.2
December	91.7	77.6	84.7	102.0 *9/83*	65.0 4/60	169.0 26/23	..	6.9
Year: Averages	90.3	74.1	82.2	.. ..	.. ..	.. ..	..	8.4
Year: Extremes	..	..	..	104.8 17/10/1892	50.7 29/7/42	170.4 14/11/37	.	..

(*a*) Years 1882–1941 at Post Office, 1942–1966 at Aerodrome; sites not strictly comparable. (*b*) Records discontinued 1942 (*c*) 5/1938 and 23/1938. (*d*) 26/1883 and 27/1883. (*e*) 28/1916 and 3/1921.

HUMIDITY, RAINFALL, AND FOG

Month	*Vapour pressure mean 9 a.m. (m.bars)*	*Rel. hum. (%) at 9 a.m.*			*Rainfall (inches)*					*Fog Mean No. days*
		Mean	*Highest mean*	*Lowest mean*	*Mean mthly*	*Mean No. of days of rain*	*Greatest monthly*	*Least monthly*	*Greatest in one day*	
No. of years of observations	85	85	57(*a*)	57(*a*)	86(*b*)	69	99(*c*)	99(*c*)	99(*c*)	30
January	31.1	80	89	69	15.40	19	27.86 1896	2.67 1906	11.67 *7/97*	0.0
February	31.1	81	88	71	13.00	18	28.23 1956	0.53 1931	11.00 18/55	0.0
March	30.7	80	84	69	10.24	17	23.42 1965	0.81 1911	7.18 6/19	0.0
April	27.0	72	80	60	4.05	8	23.74 1891	Nil 1950	6.22 4/59	0.0
May	21.8	65	76	49	0.56	1	10.27 1882	Nil (*d*)	2.19 6/22	0.0
June	18.7	63	75	52	0.12	0	1.53 1902	Nil (*d*)	1.32 10/02	0.4
July	17.6	62	71	47	0.05	0	2.56 1900	Nil (*d*)	1.71 2/00	1.1
August	20.6	66	73	53	0.06	0	3.30 1947	Nil (*d*)	3.15 22/47	0.7
September	24.7	68	73	54	0.51	2	4.26 1942	Nil (*d*)	2.78 21/42	0.2
October	27.7	68	72	60	1.98	5	13.34 1954	Nil (*d*)	3.74 18/56	0.0
November	29.3	70	75	62	4.96	11	15.72 1938	0.40 1870	4.73 9/51	0.0
December	30.5	75	83	65	9.55	16	22.94 1965	0.98 1934	7.87 28/10	0.0
Year: Totals	..	..	..	..	60.48	97	.. ..	.. ..	.. ..	2.4
Year: Averages	25.9	71	..	..	..	..	.. ..	.. ..	.. ..	..
Year: Extremes	..	..	89	47	..	..	28.23 2/1956(*f*)	Nil (*e*)	11.67 7/1/1897	..

(*a*) 1882 to 1938 at Post Office. (*b*) 1869 to 1962 at Post Office, eight years missing. (*c*) The figures below are the highest or lowest recorded at either the Post Office or Aerodrome sites. (*d*) Various years. (*e*) April to October, various years. (*f*) 30.65 inches were recorded February 1967 at Darwin Regional Office. Records from this office will be incorporated in future tables.

Figures such as *2/82*, 26/42, etc. indicate, in respect of the month of reference, the day and year of the occurrence. Dates in italics relate to nineteenth century.

CLIMATOLOGICAL DATA: ADELAIDE, SOUTH AUSTRALIA

(Lat. 34° 56′ S., Long. 138° 35′ E. Height above M.S.L. 140 ft)

BAROMETER, WIND, EVAPORATION, LIGHTNING, CLOUDS, AND CLEAR DAYS

Month	Bar. corrected to 32° F. mn sea level and standard gravity from 9 a.m. and 3 p.m. readings (m.bars)	Wind (height of anemometer 75 ft) Average miles per hour	Highest mean speed in one day (mph)		Highest gust speed (mph)	Prevailing direction 9 a.m.	Prevailing direction 3 p.m.	Mean amt evaporation (in)	No. days lightning	Mean amt clouds 9 a.m., 3 p.m., 9 p.m. (a)	No. clear days
No. of years of observations	111	16(*b*)		16(*b*)	51	30(*c*)	30(*c*)	95	96	100	53
January	1,013.3	7.8	18.2	3/55	72	SW	SW	9.29	2.1	2.9	12.4
February	1,014.3	7.4	17.8	25/67	66	NE	SW	7.52	1.5	2.9	10.8
March	1,017.2	6.9	19.1	24/64	78	S	SW	6.26	1.7	3.2	11.0
April	1,019.9	6.9	23.2	10/56	81	NE	SW	3.78	1.5	4.1	7.0
May	1,020.1	7.0	23.5	19/53	70	NE	NW	2.30	1.5	4.7	4.7
June	1,019.7	7.3	18.4	12/53	67	NE	N	1.47	1.5	5.0	4.0
July	1,019.9	7.2	20.4	13/64	92	NE	NW	1.47	1.5	4.8	3.7
August	1,019.1	7.8	23.7	8/55	75	NE	SW	2.09	1.8	4.2	5.0
September	1,017.6	8.0	21.7	16/65	69	NNE	SW	3.18	1.8	4.2	5.9
October	1,015.8	8.3	21.9	6/62	75	NNE	SW	5.03	2.7	4.2	5.4
November	1,015.1	8.4	20.6	8/52	81	SW	SW	6.78	3.0	3.9	6.8
December	1,013.3	8.2	17.9	6/52	75	SW	SW	8.62	2.2	3.3	9.1
Year Totals	..	..	..	..	..	..	..	57.79	22.8	..	85.8
Year Averages	1,017.1	7.6	..	..	..	NE	SW	..	..	3.9	..
Year Extremes	..	..	23.7	8/8/55	92	..	..	..	..	..	..

(*a*) Scale 0–8. (*b*) Records taken from a Munro Anemometer 1952–1967. (*c*) Standard thirty years normal (1931–1960).

TEMPERATURE AND SUNSHINE

Month	Mean temperature (°Fahr.) Mean max.	Mean min.	Mean	Extreme shade temperature (°Fahr.) Highest		Lowest		Extreme temperature (°Fahr.) Highest in sun		Lowest on grass		Mean daily hours sunshine
No. of years of observations	111	111	111		111		111		54(*a*)		107	86
January	85.4	61.4	73.4	117.7	12/39	45.1	*21/84*	180.0	*18/82*	36.5	*14/79*	9.9
February	85.0	61.7	73.3	113.6	*12/99*	45.5	23/18	170.5	10/00	35.8	23/26	9.3
March	80.5	59.0	69.7	110.5	9/34	43.9	21/33	174.0	*17/83*	32.1	21/33	7.8
April	72.9	54.6	63.7	98.6	5/38	39.6	*15/59*	155.0	*1/83*	28.0	14/63	5.9
May	65.7	50.4	58.1	89.5	4/21	36.9	(*b*)	148.2	*12/79*	25.6	19/28	4.8
June	60.5	46.8	53.7	78.1	4/57	32.5	(*c*)	138.8	*18/79*	21.0	24/44	4.2
July	58.9	44.9	51.9	74.0	11/06	32.0	24/08	134.5	*26/90*	22.1	30/29	4.3
August	61.7	46.0	53.9	85.0	31/11	32.3	*17/59*	140.0	*31/92*	22.8	11/29	5.2
September	66.2	48.1	57.1	95.1	30/61	32.7	*4/58*	160.5	*23/82*	25.0	25/27	6.1
October	71.8	51.5	61.7	102.9	21/22	36.1	*20/58*	162.0	30/21	27.8	(*d*)	7.2
November	77.6	55.2	66.5	113.5	*21/65*	40.8	2/09	166.9	*20/78*	31.5	2/09	8.5
December	82.3	58.8	70.5	114.6	29/31	43.0	(*e*)	175.7	*7/99*	32.5	*4/84*	9.4
Year Averages	72.4	53.2	62.8	..	..	..	..	..	..	..	..	6.9
Year Extremes	..	..	..	117.7	12/1/39	32.0	24/7/08	180.0	18/1/1882	21.0	24/6/44	..

(*a*) Records incomplete 1931–1934. Discontinued 1934. (*b*) 26/1895 and 24/1904. (*c*) 27/1876 and 24/1944. (*d*) 4/1931 and /1918. (*e*) 16/1861 and 4/1906.

HUMIDITY, RAINFALL, AND FOG

Month	Vapour pressure mean 9 a.m. (m.bars)	Rel. hum. (%) at 9 a.m. Mean	Highest mean	Lowest mean	Rainfall (inches) Mean mthly	Mean No. of days of rain	Greatest monthly		Least monthly		Greatest in one day		Fog Mean No. days
No. of years of observations	100	100	100	100	129	129		129		129		129	68
January	11.6	40	59	29	0.76	4	3.31	1941	Nil	(*a*)	2.30	*2/89*	0.0
February	12.4	43	57	30	0.76	4	6.09	1925	Nil	(*a*)	5.57	7/25	0.0
March	11.9	47	58	29	0.94	5	4.59	1878	Nil	(*a*)	3.50	*5/78*	0.0
April	11.4	56	72	37	1.71	10	5.81	1938	Nil	1945	3.15	*5/60*	0.0
May	10.9	67	76	49	2.70	13	7.75	1875	0.10	1934	2.75	*1/53*	0.4
June	9.8	75	84	63	2.88	15	8.58	1916	0.23	1958	2.11	1/20	1.1
July	9.4	76	87	66	2.61	16	5.44	1890	0.39	1899	1.75	*10/65*	1.3
August	9.7	70	78	54	2.43	16	6.20	1852	0.33	1944	2.23	*19/51*	0.6
September	10.0	60	72	44	2.01	13	5.83	1923	0.27	1951	1.59	20/23	0.2
October	10.3	51	67	29	1.73	11	5.24	1949	0.17	1914	2.24	16/08	0.0
November	10.4	44	58	31	1.21	8	4.45	1839	0.05	1967	2.96	12/60	0.0
December	11.2	40	56	31	1.03	6	3.98	1861	Nil	1904	2.42	23/13	0.0
Year Totals	..	..	..	..	20.77	121	..	..	..	..	..	..	3.6
Year Averages	10.7	56	..	..	..	..	..	..	..	..	..	..	..
Year Extremes	..	..	87	29	..	..	8 58	6/1916	Nil	(*b*)	5.57	7/2/25	..

(*a*) Various years. (*b*) December to April, various years.

Figures such as 3/55, *21/84*, etc. indicate, in respect of the month of reference, the day and year of the occurrence. Dates in italics elate to nineteenth century.

CLIMATOLOGICAL DATA: BRISBANE, QUEENSLAND

(Lat. 27° 28′ S., Long. 153° 2′ E. Height above M.S.L. 134 ft)

BAROMETER, WIND, EVAPORATION, LIGHTNING, CLOUDS, AND CLEAR DAYS

Month	Bar. corrected to 32° F. mn sea level and standard gravity from 9 a.m. and 3 p.m. readings (m.bars)	Wind (height of anemometer 105 ft)					Mean amt evaporation (in)	No. days lightning	Mean amt clouds 9 a.m., 3 p.m., 9 p.m. (a)	No. clear days
		Average miles per hour	Highest mean speed in one day (mph)	Highest gust speed (mph)	Prevailing direction 9 a.m.	Prevailing direction 3 p.m.				
No. of years of observations	81	52	52	52	30(*b*)	30(*b*)	58	81	77(*c*)	60
January	1,011.7	7.7	19.7 23/47	68	SE	NE	6.91	6.4	4.6	3.3
February	1,012.5	7.5	23.2 21/54	67	SE	NE	5.47	5.3	4.7	2.4
March	1,014.6	7.3	20.3 1/29	66	S	E	5.23	4.0	4.3	5.6
April	1,017.3	6.6	16.7 3/25	64	S	E	4.30	3.3	3.6	7.6
May	1,018.5	6.2	17.9 17/26	49	SW	SE	3.41	3.0	3.3	9.9
June	1,018.5	6.3	19.0 14/28	59	SW	W & SW	2.74	2.0	3.3	10.3
July	1,018.7	6.1	22.0 13/54	69	SW	W & SW	2.95	2.0	2.9	13.3
August	1,018.9	6.3	14.8 4/35	62	SW	NE	3.76	3.2	2.6	13.5
September	1,017.5	6.5	16.1 1/48	63	SW	NE	4.58	4.8	2.7	12.7
October	1,015.8	6.9	15.7 1/41	62	S	NE	5.81	6.2	3.4	8.4
November	1,014.2	7.3	15.5 10/28	69	SE & N	NE	6.49	7.6	3.9	5.9
December	1,012.0	7.5	19.5 15/26	79	SE	NE	7.19	8.9	4.2	4.2
Year Totals	..	..	.. ..	..	..	..	**58.84**	**56.7**	..	**97.1**
Year Averages	**1,015.9**	**6.9**	.. ..	..	SW	NE	..	..	**3.6**	..
Year Extremes	..	..	**23.2 21/2/54**	**79**	..	..	..	..	..	..

(*a*) Scale 0–8. (*b*) Standard thirty years normal (1911–1940). (*c*) July to December inclusive, seventy-four years.

TEMPERATURE AND SUNSHINE

Month	Mean temperature (°Fahr.)			Extreme shade temperature (°Fahr.)		Extreme temperature (°Fahr.)		Mean daily hours sunshine
	Mean max.	Mean min.	Mean	Highest	Lowest	Highest in sun	Lowest on grass	
No. of years of observations	81	81	81	81	81	50(*a*)	80	59
January	84.9	68.9	76.9	109.8 26/40	58.8 *4/93*	169.0 2/37	49.9 *4/93*	7.6
February	84.1	68.7	76.5	105.7 21/25	58.5 23/31	165.2 6/10	49.1 22/31	7.1
March	82.1	66.5	74.3	101.8 13/65	52.4 29/13	162.5 6/39	45.4 29/13	6.8
April	78.8	61.6	70.2	95.2 (*b*)	44.4 25/25	153.8 11/16	36.7 24/25	7.1
May	73.6	55.5	64.6	90.3 21/23	40.6 30/51	147.0 1/10	29.8 *8/97*	6.9
June	69.4	51.3	60.3	88.9 19/18	36.3 29/08	136.0 3/18	25.4 *23/88*	6.5
July	68.4	48.8	58.7	84.3 23/46	36.1 (*c*)	146.1 20/15	23.9 *11/90*	7.1
August	71.1	50.2	60.6	91.0 14/46	36.9 13/64	141.9 20/17	27.1 *9/99*	7.9
September	75.2	54.7	65.1	100.9 22/43	40.7 *1/96*	155.5 26/03	30.4 *1/89*	8.3
October	79.0	60.1	69.5	105.3 30/58	43.3 *3/99*	157.4 31/18	34.9 *8/89*	8.3
November	82.0	64.3	73.2	106.1 18/13	48.5 2/05	162.3 *7/89*	38.8 1/05	8.2
December	84.5	67.3	75.8	105.9 *26/93*	56.3 5/55	165.9 28/42	49.1 *3/94*	8.1
Year Averages	**77.8**	**59.8**	**68.8**	.. ..	.. ..	.. ..	.. ..	**7.5**
Year Extremes	..	..	..	**109.8 26/1/40**	**36.1** (*c*)	**169.0 2/1/37**	**23.9 11/7/1890**	..

(*a*) From 1887 to March 1947, excluding 1927 to 1936. (*b*) 9/1896 and 5/1903. (*c*) 12/1894 and 2/1896.

HUMIDITY, RAINFALL, AND FOG

Month	Vapour pressure mean 9 a.m. (m.bars)	Rel. hum. (%) at 9 a.m.			Rainfall (inches)					Fog Mean No. days
		Mean	Highest mean	Lowest mean	Mean mthly	Mean No. of days of rain	Greatest monthly	Least monthly	Greatest in one day	
No. of years of observations	64(*a*)	81	80	80	116	108	115(*b*)	115(*b*)	115(*b*)	81
January	21.7	66	79	53	6.23	13	27.72 1895	0.32 1919	18.31 *21/87*	0.5
February	22.0	69	82	55	6.38	14	40.39 1893	0.58 1849	10.61 6/31	0.6
March	20.9	71	85	56	5.82	15	34.04 1870	Nil 1849	11.18 14/08	1.3
April	17.5	71	80	56	3.50	12	15.28 1867	0.04 1944	5.46 5/33	2.3
May	14.3	71	85	59	2.69	9	13.85 1876	Nil 1846	5.62 *9/79*	3.3
June	12.1	72	84	54	2.84	8	25.49 1967	Nil 1847	11.12 12/67	3.1
July	11.1	70	88	53	2.21	7	9.10 1965	Nil (*c*)	7.60 20/65	3.2
August	11.7	67	80	53	1.84	7	14.67 1879	Nil (*d*)	4.89 *12/87*	3.7
September	13.8	63	76	47	1.92	8	5.43 1886	0.10 1907	3.13 12/65	2.7
October	16.0	60	72	48	2.73	9	11.41 1949	0.03 1948	5.34 25/49	1.2
November	18.1	60	72	45	3.65	10	12.40 1917	Nil 1842	4.46 *16/86*	0.5
December	20.1	61	70	51	5.08	12	17.36 1942	0.35 1865	6.60 *28/71*	0.4
Year Totals	..	..	..	..	**44.89**	**124**	.. ..	.. ..	.. ..	**22.8**
Year Averages	**16.6**	**67**	..	..	..	..	.. ..	.. ..	.. ..	..
Year Extremes	..	..	**88**	**45**	..	..	**40.39 2/1893**	**Nil** (*e*)	**18.31 21/1/1887**	..

(*a*) All records up to and including 1950. (*b*) Records incomplete for various years between 1846 and 1859. (*c*) 1841 and 1951. (*d*) 1862, 1869, and 1880. (*e*) Various months in various years.

Figures such as 23/47, *4/93*, etc. indicate, in respect of the month of reference, the day and year of the occurrence. Dates in italics relate to nineteenth century.

CLIMATOLOGICAL DATA: SYDNEY, NEW SOUTH WALES

(Lat. 33° 52′ S., Long. 151° 12′ E. Height above M.S.L. 138 ft)

BAROMETER, WIND, EVAPORATION, LIGHTNING, CLOUDS, AND CLEAR DAYS

Month	*Bar. corrected to 32° F. mn sea level and standard gravity from 9 a.m. and 3 p.m. readings (m.bars)*	*Wind (height of anemometer 58 ft)*						*Mean amt evaporation (in)*	*No. days lightning*	*Mean amt clouds 9 a.m., 3 p.m., 9 p.m. (a)*	*No. clear days*
		Average miles per hour	*Highest mean speed in one day (mph)*		*Highest gust speed (mph)*	*Prevailing direction*					
						9 a.m.	*3 p.m.*				
No. of years of observations	58	25(*b*)		25(*b*)	25(*b*)	25(*b*)	25(*b*)	87	108	106	57
January	1,012.7	7.6	18.8	10/49	93	NE	NE	5.32	4.7	4.7	5.1
February	1,014.0	7.2	18.8	18/57	63	NE	ENE	4.20	4.1	4.8	4.6
March	1,016.4	6.5	20.7	10/44	58	WNW	ENE	3.65	3.6	4.4	5.9
April	1,018.3	6.3	22.5	24/44	72	W	ENE	2.71	3.4	4.1	7.1
May	1,018.7	6.5	21.0	18/55	63	W	ENE	1.93	2.7	3.9	7.9
June	1,018.9	7.2	22.4	10/47	84	W	WSW	1.49	2.0	4.0	8.3
July	1,018.3	7.1	21.3	20/51	66	W	WSW	1.56	2.1	3.5	10.4
August	1,018.0	7.5	24.6	9/51	68	WNW	WNW	2.02	2.8	3.3	10.5
September	1,017.0	7.2	21.8	23/42	70	WNW	NE	2.75	3.6	3.5	9.1
October	1,015.0	7.6	24.5	1/57	95	WNW	ENE	3.91	4.4	4.1	6.7
November	1,013.4	7.7	19.8	21/54	71	WNW	ENE	4.70	5.2	4.5	5.4
December	1,012.0	7.6	22.5	11/52	75	NE	ENE	5.38	5.6	4.6	5.0
Year **Totals**	..	..	..	..	..	..	..	39.62	44.2	..	86.0
Year **Averages**	**1,016.1**	**7.2**	..	..	..	WNW	ENE	..	..	4.2	..
Year **Extremes**	..	..	**24.6**	**9/8/51**	**95**	..	..	..	..	..	..

(*a*) Scale 0–8. (*b*) Years 1938–1962 inclusive.

TEMPERATURE AND SUNSHINE

Month	*Mean temperature (°Fahr.)*			*Extreme shade temperature (°Fahr.)*				*Extreme temperature (°Fahr.)*				*Mean daily hours sunshine*
	Mean max.	*Mean min.*	*Mean*	*Highest*		*Lowest*		*Highest in sun*		*Lowest on grass*		
No. of years of observations	109	109	109		109		109		84(*a*)		109	47
January	78.2	65.0	71.6	113.6	14/39	51.1	18/49	164.3	26/15	43.7	6/25	7.3
February	77.8	65.2	71.5	107.8	8/26	49.3	*28/63*	168.3	14/39	42.8	22/33	6.8
March	76.0	63.1	69.6	102.6	*3/69*	48.8	*14/86*	158.3	10/26	39.9	17/13	6.3
April	71.7	58.0	64.9	91 4	1/36	44.6	*27/64*	144.1	*10/77*	33.3	24/09	6.1
May	66.2	52.2	59.2	86.0	1/19	40.2	*22/59*	129.7	*1/96*	29.3	25/17	5.8
June	61.8	48.4	55.1	80.4	11/31	35.7	22/32	125.5	2/23	28.0	22/32	5.3
July	60.4	46.1	53.3	78.3	22/26	35.9	*12/90*	124.7	*19/77*	24.0	*4/93*	6.1
August	63.3	47.7	55.5	86.8	24/54	36.8	*3/72*	149.0	*30/78*	26.1	4/09	6.8
September	67.3	51.4	59.3	94.2	26/65	40.8	2/45	142.2	*12/78*	30.1	17/05	7.1
October	71.4	55.9	63.7	99.4	4/42	42.2	6/27	152.2	20/33	32.7	9/05	7.3
November	74.4	59.6	67.0	104.5	6/46	45.8	1/05	158.5	*28/99*	36.0	6/06	7.6
December	76.9	62.9	69.9	108.0	20/57	48.4	3/24	164.5	*27/89*	41.4	3/24	7.3
Year **Averages**	**70.4**	**56.3**	**63.3**	..	..	..	..	..	..	..	..	6.7
Year **Extremes**	..	..	..	**113.6**	**14/1/39**	**35.7**	**22/6/32**	**168.3**	**14/2/39**	**24.0**	**4/7/1893**	..

(*a*) Records discontinued 1946.

HUMIDITY, RAINFALL, AND FOG

Month	*Vapour pressure mean 9 a.m. (m.bars)*	*Rel. hum. (%) at 9 a.m.*			*Rainfall (inches)*								*Fog Mean No. days*
		Mean	*Highest mean*	*Lowest mean*	*Mean mthly*	*Mean No. of days of rain*	*Greatest monthly*		*Least monthly*		*Greatest in one day*		
No. of years of observations	92	92	92	92	109	109		109		109		109	47
January	18.8	68	78	58	3.73	13	15.26	1911	0.25	1932	7.08	13/11	0.3
February	19.3	70	81	60	4.41	13	22.22	1956	0.12	1939	8.90	*25/73*	0.7
March	18.3	74	85	62	5.02	14	20.52	1942	0.42	1876	11.05	28/42	1.6
April	15.1	74	87	63	5.07	13	24.49	1861	0.06	1868	7.52	*29/60*	2.3
May	12.2	77	90	63	4.96	14	23.03	1919	0.14	1957	8.36	*28/89*	3.3
June	10.3	75	89	63	5.22	12	25.30	1950	0.16	1962	5.17	*16/84*	2.7
July	9.4	74	88	59	4.30	11	13.23	1950	0.10	1946	7.80	7/31	2.3
August	9.7	69	84	54	3.17	11	14.89	1899	0.04	1885	5.33	*2/60*	1.9
September	11.2	65	79	49	2.76	12	14.05	1879	0.08	1882	5.69	*10/79*	1.0
October	13.1	62	77	46	2.99	12	11.13	(*a*)	0.21	1867	6.37	13/02	0.5
November	15.0	62	79	42	3.02	12	20.36	1961	0.07	1915	5.24	27/55	0.5
December	17.4	65	77	51	3.10	13	15.82	1920	0.23	1913	4.75	13/10	0.4
Year **Totals**	..	..	..	..	47.75	150	..	..	..	..	..	..	17.5
Year **Averages**	**14.1**	**69**	..	..	..	..	..	..	..	..	..	..	..
Year **Extremes**	..	..	**90**	**42**	..	..	**25.30**	**6/1950**	**0.04**	**8/1885**	**11.05**	**28/3/42**	..

(*a*) 1916 and 1959.

Figures such as 10/49, *28/63*, etc. indicate, in respect of the month of reference, the day and year of the occurrence. Dates in italics relate to nineteenth century.

CLIMATOLOGICAL DATA: CANBERRA, AUSTRALIAN CAPITAL TERRITORY

(Lat. 35° 18′ S., Long. 149° 6′ E. Height above M.S.L., 1,906 ft)

BAROMETER, WIND, EVAPORATION, THUNDER, CLOUDS, AND CLEAR DAYS

Month	*Bar. corrected to 32° F. mn sea level and standard gravity from 9 a.m. and 3 p.m. readings (m.bars)*	*Wind (height of anemometer 20 ft)*						*Mean amt evaporation (in)*	*No. days thunder*	*Mean amt clouds 9 a.m., and 3 p.m., (a)*	*No. clear days*
		Average miles per hour	*Highest mean speed in one day (mph)*		*Highest gust speed (mph)*	*Prevailing direction*					
						9 a.m.	*3 p.m.*				
No. of years of observations	29	38(*b*)		38(*b*)	29(*c*)	29(*c*)	29(*c*)	38(*d*)	29	29	28(*e*)
January	1,011.1	4.4	14.9	23/33	65	NW	W	7.89	2.4	4.0	7.9
February	1,012.5	3.9	15.3	24/33	65	SSE	WNW	6.15	1.8	4.3	7.3
March	1,016.2	3.4	18.2	28/42	69	SSE	NW	5.04	1.1	4.1	8.2
April	1,017.9	3.2	18.6	8/45	61	S	NW	3.26	0.7	4.2	7.2
May	1,020.1	3.0	13.2	27/58	65	NW	NW	1.90	0.4	4.5	7.1
June	1,020.1	3.1	16.1	2/30	60	NW	NW	1.22	0.2	4.6	6.9
July	1,020.4	3.2	23.4	7/31	63	NNW	NW	1.22	0.1	4.5	7.1
August	1,018.1	3.7	15.7	25/36	70	NW	NW	1.73	0.5	4.2	8.0
September	1,017.6	4.0	17.4	28/34	61	NW	NW	2.78	1.0	4.0	8.2
October	1,014.5	4.1	14.7	12/57	74	NW	NW	4.31	1.7	4.3	6.5
November	1,011.9	4.5	17.2	28/42	79	NW	NW	5.76	2.7	4.6	6.3
December	1,010.4	4.4	16.1	11/38	66	NW	W	7.23	3.0	4.3	7.1
Year Totals	..	..		..	..	..	..	48.49	15.6	..	87.8
Year Averages	1,015.9	3.7		..	..	NW	NW	..	..	4.3	..
Year Extremes	..	..	23.4	7/7/31	79	..	..	..	..	..	..

(*a*) Scale 0–8. (*b*) Recorded at Forestry and Timber Bureau, Yarralumla, where a cup anemometer is installed. (*c*) Recorded at Meteorological Office, R.A.A.F. Fairbairn, where a Dines Pressure Tube anemometer is installed. (*d*) Recorded at Forestry and Timber Bureau, Yarralumla. (*e*) 1940–68, excluding 1945. Formerly assessed over 37-year period at Forestry and Timber Bureau.

TEMPERATURE AND SUNSHINE

Month	*Mean temperature (°Fahr.)*			*Extreme shade temperature (°Fahr.)*				*Extreme temperature (°Fahr.)*			*Mean daily hours sunshine.*
	Mean max.	*Mean min.*	*Mean*	*Highest*		*Lowest*		*Highest in sun*	*Lowest on grass*		
No of years of observations	29	29	29		29		29			17	31
January	81.8	55.0	68.4	(*a*)106.6	31/68	35.3	1/56	..	31.2	1/56	9.1
February	79.9	54.5	67.2	108.0	1/68	37.4	16/62	..	32.5	16/62	8.4
March	76.0	50.7	63.3	97.6	9/40	30.1	24/67	..	24.8	(*b*)	7.5
April	67.3	43.7	55.5	90.7	12/68	27.2	(*c*)	..	21.0	26/65	6.9
May	58.5	37.0	47.7	76.1	10/67	18.8	16/67	..	14.6	16/57	5.5
June	53.5	33.6	43.5	68.2	3/57	16.7	8/57	..	9.8	16/59	4.6
July	51.6	31.6	41.6	61.4	(*d*)	16.3	5/57	..	10.3	21/67	5.1
August	54.6	33.5	44.1	71.0	24/54	18.3	9/41	..	12.4	4/67	6.1
September	60.6	36.8	48.7	83.4	26/65	22.0	5/40	..	16.8	24/68	7.5
October	66.2	42.3	54.3	90.8	13/46	26.0	4/57	..	20.8	4/57	8.0
November	72.3	46.7	59.5	101.8	19/44	28.8	28/67	..	20.7	28/67	8.9
December	78.6	51.9	65.3	101.9	21/53	34.0	18/64	..	25.0	18/64	9.0
Year Averages	66.7	43.1	54.9	..	..	..	..	..	..	..	7.2
Year Extremes	..	..	..	108.0	1/2/68	16.3	5/7/57	..	9.8	16/6/59	..

(*a*) A temperature of 109.0 was recorded at the former Acton station on 11.1.39. (*b*) 30/58 and 24/67. (*c*) 16/63 and 14/65 (*d* 2/46 and 9/54.

HUMIDITY, RAINFALL, AND FOG

Month	*Vapour pressure mean 9 a.m. (m.bars)*	*Rel. hum. (%) at 9 a.m.*			*Rainfall (inches)*								*Fog Mean No. days*
		Mean	*Highest mean*	*Lowest mean*	*Mean mthly*	*Mean No. of days of rain*	*Greatest monthly*		*Least monthly*		*Greatest in one day*		
No. of years of observations	27(*a*)	27	27	27	29	29		29		29		29	29
January	13.2	58	69	39	2.32	7	6.46	1941	0.04	1947	3.74	12/45	0.5
February	13.9	64	71	40	1.96	7	5.70	1948	Nil	1968	2.07	3/46	0.7
March	12.7	67	82	48	2.10	7	12.29	1950	0.05	1954	2.60	5/59	2.5
April	10.3	74	81	54	1.92	8	6.06	1940	0.08	1942	2.96	2/59	2.7
May	8.4	81	89	67	2.13	9	5.62	1948	0.06	1961	2.65	5/53	6.2
June	7.0	84	90	71	1.57	9	4.96	1956	0.23	1944	1.78	25/56	6.2
July	6.8	83	91	73	1.53	10	4.07	1960	0.25	1940	2.11	6/51	6.7
August	7.4	78	88	60	1.67	11	4.18	1955	0.28	1944	1.11	3/51	3.8
September	8.1	72	78	51	1.88	10	4.48	1962	0.23	1946	1.62	16/62	2.0
October	9.7	63	72	46	2.69	12	5.81	1959	0.25	1940	4.13	21/59	1.7
November	10.5	56	67	38	2.33	9	5.31	1961	0.52	1940	2.51	9/50	1.0
December	11.9	54	70	37	2.35	8	6.31	1960	Nil	1967	3.41	30/48	0.1
Year Totals	..	..	..	..	24.45	107	..	..	..	..	..	..	34.1
Year Averages	10.0	69	..	..	..	..	..	..	..	..	..	..	..
Year Extremes	..	..	91	37	..	..	12.29	3/50	Nil	(*b*)	4.13	21/10/59	..

(*a*) Formerly assessed over 38-year period at Forestry and Timber Bureau, Yarralumla. (*b*) 12/67 and 2/68.

Data shown in the above tables relate to the Meteorological Office, R.A.A.F., Fairbairn, except where otherwise indicated, and cover years up to 1968. Figures such as 23/33, 31/68, etc. indicate, in respect of the month of reference, the day and year of the occurrence.

CLIMATOLOGICAL DATA: MELBOURNE, VICTORIA

(Lat. 37° 49′ S., Long. 144° 58′ E. Height above M.S.L., 114 ft)

BAROMETER, WIND, EVAPORATION, LIGHTNING, CLOUDS, AND CLEAR DAYS

Month	Bar. corrected to 32° F. mn sea level and standard gravity from 9 a.m. and 3 p.m. readings (m.bars)	*Wind (height of anemometer 93 ft)* Average miles per hour	Highest mean speed in one day (mph)	Highest gust speed (mph)	Prevailing direction 9 a.m.	Prevailing direction 3 p.m.	Mean amt evaporation (in)	No. days lightning	Mean amt clouds 9 a.m., 3 p.m., 9 p.m. (a)	No. clear days
No. of years of observations	111	28(b)	55	58	49	49	95	60	110	60
January	1,012.8	8.4	21.1 27/41	66	S	S	6.50	1.8	4.1	6.7
February	1,014.3	8.1	19.0 13/47	74	S & SW	S	5.11	2.3	4.0	5.9
March	1,016.8	7.4	18.0 3/61	66	N	S	4.14	1.4	4.4	5.4
April	1,019.0	7.0	19.9 16/43	67	N	S	2.52	1.1	4.8	4.2
May	1,019.2	7.3	20.5 4/61	72	N	N & S	1.56	0.5	5.2	2.9
June	1,018.9	7.4	22.8 16/47	64	N	N	1.15	0.4	5.3	2.7
July	1,018.6	8.1	22.7 22/60	68	N	N	1.13	0.4	5.2	2.6
August	1,017.7	8.0	21.3 20/42	65	N	N & S	1.52	0.7	5.0	2.8
September	1,016.0	8.1	21.1 15/64	69	N	S	2.38	1.0	4.8	3.6
October	1,014.7	8.2	18.6 12/52	69	N	S	3.42	1.6	4.9	3.5
November	1,013.9	8.6	21.2 13/58	71	SW	S	4.55	2.2	4.9	3.1
December	1,012.4	8.5	21.0 12/52	61	S & SW	S	5.80	2.1	4.5	4.4
Year Totals	..	..	.. ..	..	..	..	39.78	15.5	..	47.8
Year Averages	1,016.2	7.9	.. ..	..	N	S	..	..	4.8	..
Year Extremes	..	..	22.8 16/6/47	74	..	..	..	..	..	..

(*a*) Scale 0–8. (*b*) Early records not comparable.

TEMPERATURE AND SUNSHINE

Month	*Mean temperature (°Fahr.)* Mean max.	Mean min.	Mean	*Extreme shade temperature (°Fahr.)* Highest	Lowest	*Extreme temperature (°Fahr.)* Highest in sun	Lowest on grass	Mean daily hours sunshine
No. of years of observations	112	112	112	112	112	86(a)	108	52
January	78.4	56.9	67.6	114.1 13/39	42.0 *28/85*	178.5 *14/62*	30.2 *28/85*	8.1
February	78.0	57.3	67.7	109.5 7/01	40.2 24/24	167.5 *15/70*	30.9 *6/91*	7.5
March	74.7	54.9	64.8	107.0 11/40	37.1 *17/84*	164.5 *1/68*	28.9 (b)	6.6
April	68.0	50.7	59.4	94.8 5/38	34.8 *24/88*	152.0 *8/61*	25.0 *23/97*	5.7
May	61.6	46.8	54.3	83.7 7/05	29.9 29/16	142.6 *2/59*	21.1 26/16	3.7
June	57.0	44.0	50.5	72.3 2/57	28.0 *11/66*	129.0 *11/61*	19.9 30/29	3.4
July	55.8	42.1	48.9	69.3 22/26	27.0 *21/69*	125.8 *27/80*	20.5 12/03	3.7
August	58.7	43.4	51.0	77.0 *20/85*	28.3 *11/63*	137.4 *29/69*	21.3 14/02	4.6
September	62.9	45.6	54.3	88.6 28/28	31.0 3/40	142.1 *20/67*	22.8 8/18	5.5
October	67.2	48.4	57.8	98.4 24/14	32.1 *3/71*	154.3 *28/68*	24.8 22/18	5.9
November	71.4	51.3	61.4	105.7 *27/94*	36.5 *2/96*	159.6 *29/65*	24.6 *2/96*	6.5
December	75.4	54.5	65.0	110.7 *15/76*	40.0 *4/70*	170.3 *20/69*	33.2 1/04	7.3
Year Averages	67.4	49.7	58.6	.. ..	.. ..	.. ..	.. ..	5.7
Year Extremes	..	..	..	114.1 13/1/39	27.0 21/7/1869	178.5 14/1/1862	19.9 30/6/29	..

(*a*) Records discontinued 1946. (*b*) 17/1884 and 20/1897.

HUMIDITY, RAINFALL, AND FOG

Month	Vapour pressure mean 9 a.m. (m.bars)	*Rel. hum. (%) at 9 a.m.* Mean	Highest mean	Lowest mean	*Rainfall (inches)* Mean mthly	Mean No. of days of rain	Greatest monthly	Least monthly	Greatest in one day	Fog Mean No. days
No. of years of observations	60	60	60	60	112	112	112	112	112	110
January	13.0	58	68	50	1.86	8	6.92 1963	0.01 1932	4.25 29/63	0.1
February	14.1	63	77	48	1.88	7	7.72 1939	0.02 1965	3.44 26/46	0.3
March	13.2	66	79	50	2.09	9	7.50 1911	0.14 1934	3.55 5/19	0.8
April	11.7	72	82	66	2.32	11	7.67 1960	Nil 1923	3.15 23/60	1.9
May	10.4	79	88	70	2.20	13	5.60 1942	0.14 1934	1.85 *7/91*	3.8
June	9.3	83	92	73	2.01	14	4.51 1859	0.61 1958	1.74 21/04	4.8
July	8.9	81	86	75	1.94	15	7.02 1891	0.57 1902	2.71 *12/91*	4.5
August	9.1	76	82	65	1.93	15	4.35 1939	0.48 1903	1.94 26/24	2.4
September	9.7	68	76	60	2.34	14	7.93 1916	0.52 1907	2.62 *12/80*	0.9
October	10.4	62	71	52	2.67	14	7.61 1869	0.29 1914	3.00 *17/69*	0.4
November	11.1	60	69	52	2.30	11	8.11 1954	0.25 1895	2.86 21/54	0.2
December	12.3	59	69	48	2.29	10	7.18 1863	0.11 1904	3.92 4/54	0.2
Year Totals	..	..	..	..	25.83	141	.. ..	.. ..	.. ..	20.3
Year Averages	11.1	69	..	..	..	..	.. ..	.. ..	.. ..	..
Year Extremes	..	..	92	48	..	..	8.11 11/1954	Nil 4/1923	4.25 29/1/63	..

Figures such as 27/41, *28/85*, etc. indicate, in respect of the month of reference, the day and year of the occurrence. Dates in italics relate to nineteenth century.

CLIMATOLOGICAL DATA: HOBART, TASMANIA

(Lat. 42° 53′ S., Long. 147° 20′ E. Height above M.S.L. 177 ft)

BAROMETER, WIND, EVAPORATION, LIGHTNING, CLOUDS, AND CLEAR DAYS

Month	Bar. corrected to 32° F. mn sea level and standard gravity from 9 a.m. and 3 p.m. readings (m.bars)	Wind (height of anemometer 40 ft)					Mean amt evaporation (in)	No. days lightning	Mean amt clouds 9 a.m., 3 p.m., 9 p.m. (a)	No. clear days
		Average miles per hour	Highest mean speed in one day (mph)	Highest gust speed (mph)	Prevailing direction 9 a.m.	Prevailing direction 3 p.m.				
No. of years of observations	82	57	57	78	30(*b*)	30(*b*)	55	30(*b*)	82	30(*b*)
January	1,010.5	7.8	20.8 30/16	81	NNW	SSE	4.86	0.9	5.0	1.9
February	1,012.7	7.1	25.2 4/27	75	NNW	SSE	3.73	1.0	4.9	2.3
March	1,014.3	6.8	21.4 13/38	79	NW	SSE	3.18	1.2	4.8	2.4
April	1,015.6	6.7	24.1 9/52	74	NW	W	2.05	0.7	5.0	1.7
May	1,015.5	6.4	22.0 21/65	84	NNW	NW	1.38	0.4	5.0	2.4
June	1,015.3	6.3	23.7 27/20	82	NW	NW	0.93	0.4	5.0	2.4
July	1,014.1	6.5	22.9 22/53	80	NNW	NNW	0.92	0.3	4.8	2.0
August	1,012.9	6.8	25.5 19/26	87	NNW	NW	1.30	0.4	4.9	2.1
September	1,011.5	7.7	26.7 28/65	93	NNW	NW	1.99	0.7	4.9	1.5
October	1,010.2	7.8	20.2 3/65	87	NNW	SW	2.92	0.6	5.2	1.0
November	1,009.8	7.9	21.2 18/15	84	NNW	S	3.75	0.7	5.2	1.3
December	1,009.4	7.6	23.4 1/34	76	NNW	SSE	4.39	0.5	5.3	1.1
Year Totals	..	..	.. ..	..	..	..	31.40	7.8	..	22.1
Year Averages	1,012.7	7.1	.. ..	..	NNW	W	..	..	5.0	..
Year Extremes	..	..	26.7 28/9/65	93	..	..	..	..	..	..

(*a*) Scale 0–8. (*b*) Standard thirty years normal (1911–1940).

TEMPERATURE AND SUNSHINE

Month	Mean temperature (°Fahr.)			Extreme shade temperature (°Fahr.)		Extreme temperature (°Fahr.)		Mean daily hours sunshine
	Mean max.	Mean min.	Mean	Highest	Lowest	Highest in sun	Lowest on grass	
No. of years of observations	84	84	84	84	84	57(*a*)	80	72
January	70.5	52.6	61.5	105.0 (*b*)	40.1 (*c*)	160.0 (*d*)	30.6 *19/97*	7.5
February	70.6	52.9	61.7	104.4 *12/99*	39.0 *20/87*	165.0 *24/98*	28.3 *—/87*	6.7
March	67.9	50.8	59.3	99.1 13/40	35.2 31/26	150.9 26/44	27.5 30/02	6.0
April	62.5	47.5	55.0	87.1 1/41	33.2 14/63	142.0 *18/93*	25.0 *—/86*	4.8
May	57.5	44.0	50.7	77.8 5/21	29.2 20/02	128.0 (*e*)	20.0 19/02	4.2
June	53.1	41.2	47.1	69.2 1/07	29.2 28/44	122.0 *12/94*	18.1 24/63	3.7
July	52.5	39.9	46.2	66.1 14/34	27.7 *11/95*	121.0 *12/93*	18.7 *16/86*	4.2
August	55.1	41.0	48.1	71.6 28/14	28.8 5/62	129.0 *—/87*	20.1 7/09	4.8
September	58.9	43.1	51.0	81.7 23/26	31.0 *16/97*	138.0 *23/93*	18.3 16/26	5.5
October	62.3	45.5	53.9	92.0 24/14	32.0 *12/89*	156.0 *9/93*	23.8 (*f*)	5.9
November	65.3	48.0	56.7	98.3 26/37	35.0 16/41	154.0 *19/92*	26.0 *1/08*	6.8
December	68.3	50.9	59.6	105.2 *30/97*	38.0 3/06	161.5 10/39	27.2 *—/86*	6.9
Year Averages	62.0	46.5	54.2	.. ..	.. ..	.. ..	.. ..	5.6
Year Extremes	..	..	..	105.2 30/12/1897	27.7 11/7/1895	165.0 24/2/1898	18.1 24/6/63	..

(*a*) Period 1934–1938 not comparable; records discontinued 1946. (*b*) 1/1900 and 19/1959. (*c*) 9/1937 and 11/1937. (*d*) 5/1886 and 13/1905. (*e*) —/1899 and —/1893. (*f*) 1/1886 and 1/1899.

HUMIDITY, RAINFALL, AND FOG

Month	Vapour pressure mean 9 a.m. (m.bars)	Rel. hum. (%) at 9 a.m.			Rainfall (inches)					Fog Mean No. days
		Mean	Highest mean	Lowest mean	Mean mthly	Mean No. of days of rain	Greatest monthly	Least monthly	Greatest in one day	
No. of years of observations	74	74	74	74	85	85	85	85	85	30(*a*)
January	11.0	58	81	45	1.93	11	5.91 1893	0.17 (*b*)	2.96 30/16	0.0
February	11.8	62	83	49	1.59	10	6.72 1964	0.11 1914	2.20 1/54	0.0
March	11.1	65	78	52	1.85	11	10.05 1946	0.29 1943	3.47 17/46	0.3
April	10.0	70	84	57	2.18	12	9.75 1960	0.07 1904	5.25 23/60	0.2
May	8.8	75	86	61	1.91	14	8.43 1958	0.14 1913	1.75 *2/93*	0.9
June	7.9	78	91	61	2.38	15	9.38 1954	0.28 1886	5.80 7/54	0.8
July	7.6	78	87	72	2.12	15	6.12 1967	0.17 1950	2.51 18/22	1.0
August	8.0	73	86	59	1.89	16	6.32 1946	0.30 1892	2.28 *14/90*	0.4
September	8.3	66	81	52	2.10	15	7.93 1957	0.38 1951	6.15 15/57	0.1
October	9.3	62	74	52	2.52	17	7.60 1947	0.39 1914	2.58 4/06	0.0
November	9.5	58	73	49	2.15	14	7.39 1885	0.33 1921	3.70 *30/85*	0.1
December	10.6	58	73	42	2.21	13	7.72 1916	0.17 1931	3.33 5/41	0.0
Year Totals	..	..	..	..	24.83	163	.. ..	.. ..	.. ..	3.8
Year Averages	9.5	67	..	..	..	..	.. ..	.. ..	.. ..	..
Year Extremes	..	..	91	42	..	..	10.05 3/1946	0.07 4/1904	6.15 15/9/57	..

(*a*) 1922–1951. (*b*) 1915 and 1958.

Figures such as 30/16, *12/99*, etc. indicate, in respect of the month of reference, the day and year of the occurrence. Dates in italics relate to nineteenth century.

Rainfall and temperatures, various cities

Year Book No. 34, page 28, shows rainfall and temperature, and No. 38, page 42, temperature, for various important cities throughout the world and for the Australian capitals.

Climatological data for selected Australian country towns

The following table shows some of the more important climatological data for selected Australian country towns, based on standard thirty years normals (1911–1940).

CLIMATOLOGICAL DATA FOR SELECTED AUSTRALIAN COUNTRY TOWNS

	Rainfall		*Temperature*				*Relative humidity*			
Town	*Average annual rainfall (inches)*	*Average number of wet days*	*Mean maximum, January (°F.)*	*Mean maximum, July (°F.)*	*Mean minimum, January (°F.)*	*Mean minimum, July (°F.)*	*Average index of mean relative humidity(a), January*	*Average index of mean relative humidity(a), July*	*Mean 3p.m., January (%)*	*Mean 3p.m., July (%)*
					WESTERN AUSTRALIA					
Albany	39.67	172	73.8	60.9	58.5	46.3	73	76	65	70
Broome	22.87	38	91.3	81.8	79.2	57.0	75	52	67	43
Bunbury	33.22	125	82.1	62.5	59.1	47.1	66	78	57	71
Carnarvon	9.01	35	87.2	71.7	72.1	51.6	64	66	61	57
Esperance	26.73	124	76.6	62.1	59.9	45.4	70	77	63	65
Geraldton	18.58	80	84.5	67.7	66.3	51.7	61	68	60	60
Kalgoorlie	9.46	62	93.2	62.5	64.2	42.9	43	66	27	50
Meekatharra	9.17	36	100.4	67.5	73.1	44.0	31	59	21	44
Narrogin	21.38	108	87.3	57.9	56.3	41.3	..	..	..	..
Port Hedland	11.01	20	94.3	79.3	79.4	55.6	67	49	63	47
Wyndham	25.15	55	95.9	85.0	80.2	66.2	66	38	54	35
					NORTHERN TERRITORY					
Alice Springs	9.93	31	95.3	66.9	69.8	38.9	33	49	26	32
Tennant Creek	13.85	30	98.5	75.4	75.9	51.1	41	36	27	25
					SOUTH AUSTRALIA					
Ceduna	10.50	68	81.5	62.6	58.8	43.8	..	..	..	..
Mount Gambier	26.86	192	74.2	56.2	53.5	42.4	65	79	50	69
Oodnadatta	4.44	20	99.0	66.4	72.1	42.7	27	49	17	34
Port Augusta	9.28	62	89.5	62.8	65.3	43.9	50	66	33	52
Port Lincoln	18.24	119	77.4	60.2	58.5	46.4	64	76	53	70
Port Pirie	12.99	78	89.2	61.7	62.6	45.4	51	72	..	..
					QUEENSLAND					
Atherton	53.99	116	83.8	70.9	65.0	50.0	78	79	..	..
Bundaberg	42.37	84	86.1	71.6	69.7	49.2	74	72	63	55
Cairns	86.35	140	89.7	78.1	74.2	61.0	77	74	69	63
Charleville	17.97	49	97.6	68.3	70.8	40.1	44	61	28	39
Charters Towers	23.26	59	92.9	76.0	71.3	51.6	65	64	46	47
Cloncurry	16.89	35	98.7	76.4	76.5	51.5	40	40	30	27
Ipswich	28.97	76	90.4	70.0	67.8	43.8	65	65	..	..
Longreach	15.54	37	99.6	73.2	73.3	44.3	49	56	29	35
Mackay	63.16	116	86.2	71.0	73.6	53.4	80	77	..	..
Maryborough	45.43	122	87.9	71.5	68.8	47.6	73	74	..	..
Normanton	37.56	56	94.3	84.0	77.0	58.6	70	48	52	34
Rockhampton	37.36	93	90.0	73.7	72.3	51.2	68	65	55	45
Roma	20.43	52	94.4	67.4	68.3	39.3	51	64	32	40
Toowoomba	35.19	105	82.7	61.1	61.2	40.7	73	79	..	..
Townsville	43.06	75	87.3	76.0	76.2	59.8	75	64	69	59

For footnote *see* next page.

CLIMATOLOGICAL DATA FOR SELECTED AUSTRALIAN COUNTRY TOWNS—*continued*

	Rainfall		*Temperature*				*Relative humidity*			
Town	*Average annual rainfall (inches)*	*Average number of wet days*	*Mean maximum, January (°F.)*	*Mean maximum, July (°F.)*	*Mean minimum, January (°F.)*	*Mean minimum, July (°F.)*	*Average index of mean relative humidity(a), January*	*Average index of mean relative humidity(a), July*	*Mean 3p.m., January (%)*	*Mean 3p.m., July (%*
				NEW SOUTH WALES						
Albury	27.66	99	89.9	56.4	59.8	38.2	47	74	29	64
Armidale	28.98	107	80.8	54.0	56.5	33.8	60	61	44	57
Bega	35.92	80	81.2	62.9	57.3	34.5	72	70	..	..
Bourke	11.74	44	98.0	63.8	69.3	40.8	37	64	24	48
Broken Hill	9.20	46	90.5	59.5	64.5	41.2	36	67	24	49
Cooma	18.85	88	78.8	50.4	52.2	30.2	55	67	38	56
Dubbo	20.91	72	92.1	59.7	63.8	37.5	48	74	32	56
Goulburn	24.27	112	81.5	52.4	56.2	35.8	59	74	43	67
Grafton	34.68	105	89.1	70.6	67.2	43.9	..	..	..	..
Katoomba	53.17	126	73.9	48.4	54.6	36.7	61	71	54	68
Leeton	15.76	78	88.9	56.8	63.2	38.9	44	76	..	..
Moree	21.43	56	96.0	64.8	67.4	39.0	..	..	..	..
Newcastle	41.36	132	77.7	61.4	66.6	47.7	74	70	69	61
Orange	31.52	95	83.9	51.6	53.7	31.4	..	..	..	..
Tamworth	24.41	67	91.0	60.4	63.4	36.8	..	..	..	..
Taree	47.48	110	83.9	64.5	62.0	42.7	..	..	..	..
Wagga	21.42	86	89.8	57.1	61.5	37.8	50	77	31	65
Wollongong	44.04	112	78.4	61.7	62.6	47.1	78	71	..	..
				VICTORIA						
Ballarat	27.38	170	75.7	49.8	50.5	38.4	60	81	41	75
Bendigo	20.27	111	83.0	54.2	56.5	39.4	47	75	30	64
Geelong	21.32	133	76.2	56.5	55.4	42.0	65	81	52	70
Horsham	17.57	104	85.1	56.0	55.2	38.8	50	77	33	67
Mildura	10.37	61	89.8	59.5	61.0	40.5	48	71	..	..
Sale	23.70	128	77.5	56.8	54.4	38.6	65	79	51	68
Seymour	22.17	94	84.7	55.2	54.6	37.4	56	79	..	..
Shepparton	19.94	103	86.3	55.7	58.8	39.3	49	77	32	63
Wangaratta	25.57	104	86.7	55.2	58.5	38.1	41	75	26	66
Warrnambool	25.79	153	69.9	55.6	54.7	43.6	73	83	69	77
				TASMANIA						
Burnie	38.99	170	67.6	53.7	51.9	41.7	70	82	65	74
Launceston	28.56	149	75.8	53.7	52.1	36.9	60	77	..	..
Zeehan	94.06	246	66.3	51.6	48.0	38.2	73	81	61	74

(*a*) The average index of mean relative humidity has been derived from the ratio of the average 9 a.m. vapour pressure to the saturation vapour pressure at the average mean temperature of the month. Being thus related to the mean temperature this value of relative humidity is a good approximation to the daily mean.

The table on the next page gives the latitude, longitude, and altitude of the weather recording station at each of the above towns.

LOCATION CO-ORDINATES FOR SELECTED AUSTRALIAN COUNTRY TOWNS

Station	*Lat.*	*Long.*	*Altitude (ft)*
Western Australia—			
Albany . .	34° 57′	117° 48′	226
Broome . .	17° 57′	122° 13′	39
Bunbury . .	33° 19′	115° 38′	3
Carnarvon . .	24° 53′	113° 39′	12
Esperance . .	33° 51′	121° 53′	14
Geraldton . .	28° 48′	114° 42′	92
Kalgoorlie . .	30° 46′	121° 27′	1,180
Meekatharra .	26° 36′	118° 29′	1,697
Narrogin . .	32° 54′	117° 09′	1,150
Port Hedland .	20° 23′	118° 37′	20
Wyndham . .	15° 31′	128° 09′	20
Northern Territory—			
Alice Springs .	23° 48′	133° 53′	1,790
Tennant Creek .	19° 38′	134° 11′	1,229
South Australia—			
Ceduna . .	32° 08′	133° 42′	57
Mount Gambier .	37° 45′	140° 47′	206
Oodnadatta . .	27° 33′	135° 29′	371
Port Augusta .	32° 33′	137° 47′	14
Port Lincoln .	34° 47′	135° 53′	13
Port Pirie . .	33° 11′	138° 01′	10
Queensland—			
Atherton . .	17° 17′	145° 27′	2,466
Bundaberg . .	24° 52′	152° 21′	6
Cairns . . .	16° 35′	145° 44′	10
Charleville . .	26° 25′	146° 17′	950
Charters Towers .	20° 03′	146° 08′	1,004
Cloncurry . .	20° 40′	140° 30′	621
Ipswich . .	27° 38′	152° 44′	64
Longreach . .	23° 26′	144° 15′	612
Mackay . .	21° 07′	149° 10′	9
Maryborough .	25° 32′	152° 42′	20
Normanton . .	17° 39′	141° 05′	34
Rockhampton .	23° 23′	150° 29′	26
Roma . . .	26° 36′	148° 42′	1,000
Queensland—*contd*			
Toowoomba .	27° 33′	151° 57′	1,921
Townsville .	19° 15′	146° 46′	10
New South Wales—			
Albury . .	36° 06′	146° 54′	600
Armidale . .	30° 32′	151° 38′	3,215
Bega . . .	36° 40′	149° 50′	50
Bourke . .	30° 05′	145° 58′	350
Broken Hill .	31° 57′	141° 28′	978
Cooma . .	36° 13′	149° 08′	2,749
Dubbo . .	32° 10′	148° 37′	861
Goulburn . .	34° 45′	149° 43′	2,074
Grafton . .	29° 41′	152° 56′	21
Katoomba . .	33° 43′	150° 19′	3,280
Leeton . .	34° 33′	146° 24′	496
Moree . .	29° 28′	149° 51′	680
Newcastle . .	32° 55′	151° 49′	122
Orange .	33° 18′	149° 06′	2,850
Tamworth . .	31° 05′	150° 56′	1,279
Taree . . .	31° 54′	152° 28′	30
Wagga . .	35° 08′	147° 25′	719
Wollongong .	34° 25′	150° 56′	150
Victoria—			
Ballarat . .	37° 35′	143° 50′	1,433
Bendigo . .	36° 46′	144° 17′	730
Geelong . .	38° 07′	144° 22′	57
Horsham . .	36° 40′	142° 12′	437
Mildura . .	34° 14′	142° 05′	156
Sale . . .	38° 06′	147° 08′	15
Seymour . .	37° 02′	145° 08′	464
Shepparton . .	36° 23′	145° 24′	372
Wangaratta .	36° 22′	146° 19′	493
Warrnambool .	38° 24′	142° 29′	33
Tasmania—			
Burnie . .	41° 04′	145° 54′	13
Launceston . .	41° 33′	147° 13′	546
Zeehan . .	41° 54′	145° 23′	592

The weather of 1968 (December 1967 to November 1968)

The following is a brief summary of weather experienced during the four seasons ended in November 1968. Plate 3 (between pages 32 and 33) shows the rainfall distribution for 1968.

Summer, 1967–68. The summer was characterised by a larger number than usual of tropical cyclones, most of which did not produce marked effects over the land, although there were three which produced good rains; one formed in the south of the Gulf of Carpentaria and the other two affected the northern part of the Northern Territory. These systems brought good rains to the Northern Territory.

In the tropics generally the wet season was fairly good except for western Queensland, which needed a very good season to recover from a succession of poor seasons. In most of northern New South Wales and South Australia heavy rains in January relieved the drought or the developing drought situation. In Victoria, part of Tasmania, south-eastern South Australia and southern New South Wales the summer rainfall was insufficient to relieve the drought situation.

The drought areas experienced some very hot spells and average maximum and minimum temperatures were markedly above normal. Forests became very dry and the bushfire danger was often extremely high.

Autumn, 1968. During the middle and towards the end of March two active depressions formed over, or near, Western Australia and moved south-eastward. About mid-April there was a marked movement northward of the anticyclonic belt, and the continent came under the influence of westerlies. During the second week of May a slow-moving low pressure trough altered this pattern of circulation and brought widespread rain to central and eastern Australia. When the trough reached the Tasman Sea a deep depression formed in it, and very cold conditions affected the eastern States. For the remainder of the season the westerlies again affected the south of the continent.

In south-eastern Australia autumn commenced with dry weather as the drought continued. In Western Australia early autumn rainfall was above average. Towards the end of April and in early May widespread rain alleviated drought conditions in western Queensland, brought the drought to an end in most of south-eastern Australia, and produced an excellent end to the wet season in northern Australia. At the end of autumn conditions were good generally.

There were some cold spells in all southern areas. In Western Australia snow fell on the Stirling Ranges, and in eastern Australia it extended as far north as the Dividing Range in southern Queensland. The cloudy conditions of the second half of autumn restricted the daily range of temperature; maxima were lower and minima were higher than normal.

Winter, 1968. In early June, westerlies predominated over the southern part of the continent with south-easterlies to the north. During the remainder of the month depression activity was mainly south of Western Australia. In early July there was a ridging of the anticyclones over eastern Australia and the Tasman Sea with depressions active to the west of Tasmania and in the north of the Tasman sea. From the middle of the second week of the month a series of depressions moved from southern waters into the Tasman Sea and there intensified again to bring cold conditions to south-eastern Australia up to the beginning of the last week of the month. Westerlies prevailed over southern Australia during early August and again over the latter part of the month.

Good rains were experienced over all States other than Queensland; the good rains in the north were unseasonal and caused losses in pioneer grain sorghum crops in the Northern Territory. However, in wheat-growing areas the rainfall allowed a record area of about 25 million acres to be sown with good prospects for spring growth.

At the end of winter in 1968 stock was still recovering from the effects of the 1967–68 drought, seasonal cold weather having slowed up the rate of recovery. However, the pastoral situation at the end of winter was generally good.

Day temperatures generally were lower than normal for the season, and night temperatures were about normal. There were some cold outbreaks extending to the northern coastline; Darwin had an unprecedented day on which the temperature did not reach 70°F.

Spring, 1968. The major anomalies of the circulation during this season were the lack of slow-moving anticyclones in the Great Australian Bight, the tracks of anticyclones further north than normal, stronger than normal westerlies over southern Australia penetrating northward, and the almost complete absence of depressions in the Tasman Sea.

Depressions developed mainly to the south of Western Australia and moved to the south-east through the Southern Ocean, south of Tasmania. With the strongest of the southern depressions, cold fronts and westerly winds penetrated well northward over the continent.

Rainfall was below normal in New South Wales, Queensland and in the east coast district of Tasmania. Elsewhere over the continent rainfall was mainly about normal.

In New South Wales spring conditions were very dry. Seasonal rainfall totals over most of this State were less than 60 per cent of normal; and in parts of the coastal districts falls were less than 20 per cent of normal. The drought situation in coastal areas south of Newcastle was severe; at many stations in the Metropolitan and Illawarra districts the combined winter-spring rainfall was the lowest on record.

Most of Queensland and also coastal stations in the east coast district of Tasmania received less than 50 per cent of normal spring rainfall.

Maximum temperatures were generally about normal, but a large area of inland New South Wales and Victoria experienced seasonal maxima which were more than 2°F below normal. Minimum temperatures were about normal except for parts of New South Wales.

Stock and crops were generally in fair to good condition.

CHAPTER 3

GENERAL GOVERNMENT

Parliamentary government

Scheme of parliamentary government

Under section 1 of the Commonwealth of Australia Constitution the legislative power of the Commonwealth is vested in the Parliament of the Commonwealth, which consists of the Sovereign, the Senate, and the House of Representatives. The Sovereign is represented throughout the Commonwealth by the Governor-General who, subject to the Constitution of the Commonwealth, has such powers and functions as the Sovereign is pleased to assign to him. In each State there is a State Governor who is the representative of the Sovereign for the State and who exercises such powers within the State as are conferred upon him by the Letters Patent which constitute his office and by the instructions which detail the manner in which his duties are to be fulfilled. The Legislature in each State was bicameral until 1922, when the Queensland Upper House was abolished and the Parliament became unicameral. In the bicameral Parliaments the Upper House is known in the Commonwealth Parliament as the Senate, and in the State Parliaments as the Legislative Council, while the Lower House is known in the Commonwealth Parliament as the House of Representatives, in the State Parliaments of New South Wales, Victoria, and Western Australia as the Legislative Assembly, and in the State Parliaments of South Australia and Tasmania as the House of Assembly. In Queensland the sole legislative chamber is known as the Legislative Assembly. The extent of the legislative powers of the Parliaments is defined by the Commonwealth and State Constitutions. In those States that have a bicameral legislature the Legislative Assembly or House of Assembly is the larger House. The members of the Legislative Assembly or House of Assembly, as the case may be, of each State are elected by the people, the franchise extending to adult British subjects with certain residential qualifications. With the exception of the New South Wales Legislative Council, the members of State Legislative Councils are, in common with members of the Lower Houses, elected by the people of the respective States. In New South Wales a quarter of the members of the Legislative Council retire each three years, and the continuing members of the Council and the members of the Legislative Assembly, voting as an electoral body, elect members to fill the vacant positions. In Victoria, Western Australia and Tasmania* members of the Legislative Council are elected by adult suffrage, while the franchise is limited in South Australia to the holders of certain property or service qualifications. In the Commonwealth Parliament the qualifications for the franchise are identical for both Houses, extending to adult British subjects who have lived in Australia for six months continuously.

The Sovereign

On 7 February 1952 the Governor-General and members of the Federal Executive Council proclaimed Princess Elizabeth Queen Elizabeth the Second, Queen of this Realm and of all Her other Realms and Territories, Head of the Commonwealth, Defender of the Faith, Supreme Liege Lady in and over the Commonwealth of Australia. The coronation of Her Majesty in Westminster Abbey took place on 2 June 1953.

The Governor-General

Powers and functions. As the Queen's representative in Australia, the Governor-General exercises certain prerogative powers and functions assigned to him by the Queen. Other powers and functions are conferred on him by the Constitution. Powers which have been so assigned or conferred include, among others, the power to grant pardons and to remit fines for offences against the laws of the Commonwealth; to appoint certain officers in the Diplomatic or Consular Service of the Commonwealth; to appoint times for holding the sessions of the Parliament, prorogue Parliament, and dissolve the House of Representatives; to cause writs to be issued for general elections of members of the House of Representatives; to assent in the Queen's name to a proposed law passed by both Houses of the Parliament or withhold assent, or to reserve the law for the Queen's pleasure, or to return the proposed law to the House in which it originated and transmit therewith any amendments which he may recommend; to exercise the executive power of the Commonwealth; to choose and summon Executive Councillors, who hold office during his pleasure; and to appoint Ministers of State for the Commonwealth. In addition, the command-in-chief of the defence forces of the Commonwealth is vested in the Governor-General as the Queen's representative.

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* The *Constitution Act* 1968, due to come into force on 1 July 1969, abolished property and other qualifications for members of the Legislative Council and Legislative Council electors.

Many Acts of the Commonwealth Parliament provide that the Governor-General may make regulations to give effect to the Act. The Governor-General may also be authorised by statute to issue proclamations—for example, to declare an Act in force or a state of things to exist, e.g. the calling out of the Citizen Military Forces in time of war or defence emergency. He has been given power by statute to legislate for certain Territories of the Commonwealth. Under the conventions of responsible government obtaining in British Commonwealth countries, the Governor-General's functions are exercised generally on the advice of Ministers of State.

Holders of office. The following list shows the names of the Governors-General since the inception of the Commonwealth.

GOVERNORS-GENERAL

Rt Hon. JOHN ADRIAN LOUIS, EARL OF HOPETOUN (afterwards MARQUIS OF LINLITHGOW), P.C. K.T., G.C.M.G., G.C.V.O. From 1 January 1901 to 9 January 1903.

Rt Hon. HALLAM, BARON TENNYSON, P.C., G.C.M.G. From 17 July 1902 to 9 January 1903 (Acting).

Rt Hon. HALLAM, BARON TENNYSON, P.C., G.C.M.G. From 9 January 1903 to 21 January 1904.

Rt Hon. HENRY STAFFORD, BARON NORTHCOTE, P.C., G.C.M.G., G.C.I.E., C.B. From 21 January 1904 to 9 September 1908.

Rt Hon. WILLIAM HUMBLE, EARL OF DUDLEY, P.C., G.C.B., G.C.M.G., G.C.V.O. From 9 September 1908 to 31 July 1911.

Rt Hon. THOMAS, BARON DENMAN, P.C., G.C.M.G., K.C.V.O. From 31 July 1911 to 18 May 1914.

Rt Hon. SIR RONALD CRAUFURD MUNRO-FERGUSON (afterwards VISCOUNT NOVAR OF RAITH), G.C.M.G. From 18 May 1914 to 6 October 1920.

Rt Hon. HENRY WILLIAM, BARON FORSTER OF LEPE, P.C., G.C.M.G. From 6 October 1920 to 8 October 1925.

Rt Hon. JOHN LAWRENCE, BARON STONEHAVEN (afterwards 1ST VISCOUNT STONEHAVEN), P.C., G.C.M.G., D.S.O. From 8 October 1925 to 22 January 1931.

Rt Hon. SIR ISAAC ALFRED ISAACS, G.C.B., G.C.M.G., K.C. From 22 January 1931 to 23 January 1936.

Brigadier-General the Rt Hon. ALEXANDER GORE ARKWRIGHT, BARON GOWRIE (afterwards 1ST EARL OF GOWRIE), V.C., P.C., G.C.M.G., C.B., D.S.O., K.ST.J. From 23 January 1936 to 30 January 1945.

His Royal Highness PRINCE HENRY WILLIAM FREDERICK ALBERT, DUKE OF GLOUCESTER, EARL OF ULSTER AND BARON CULLODEN, K.G., P.C., K.T., K.P., G.C.B., G.C.M.G., G.C.V.O., General in the Army, Air Chief Marshal in the Royal Air Force, One of His Majesty's Personal Aides-de-Camp. From 30 January 1945 to 11 March 1947.

Rt Hon. SIR WILLIAM JOHN MCKELL, G.C.M.G., Q.C. From 11 March 1947 to 8 May 1953.

Field Marshal SIR WILLIAM JOSEPH SLIM (afterwards VISCOUNT SLIM OF YARRALUMLA), K.G., G.C.B., G.C.M.G., G.C.V.O., G.B.E., D.S.O., M.C., K.ST.J. From 8 May 1953 to 2 February 1960.

Rt Hon. WILLIAM SHEPHERD, VISCOUNT DUNROSSIL, P.C., G.C.M.G., M.C., K.ST.J., Q.C. From 2 February 1960 to 3 February 1961.

Rt Hon. WILLIAM PHILIP, VISCOUNT DE LISLE, V.C., P.C., G.C.M.G., G.C.V.O., K.ST.J. From 3 August 1961 to 22 September 1965.

Rt Hon. RICHARD GARDINER, BARON CASEY, P.C., G.C.M.G., C.H., D.S.O., M.C., K.ST.J. From 22 September 1965 to 30 April 1969.

Rt Hon. Sir PAUL HASLUCK, P.C., G.C.M.G. From 30 April 1969.

Administrators. In addition to the holders of the office of Governor-General listed above, certain persons have, from time to time, been appointed as Administrator of the Government of the Commonwealth. Administrators are appointed in the event of the death, illness, or absence from Australia of the Governor-General, or for the period between the departure of a Governor-General and the arrival of his successor. The following is a list of such appointments.

ADMINISTRATORS

Rt Hon. FREDERIC JOHN NAPIER, BARON CHELMSFORD (afterwards 1ST VISCOUNT CHELMSFORD), K.C.M.G. From 21 December 1909 to 27 January 1910.

Lieut.-Colonel the Rt. Hon. ARTHUR HERBERT TENNYSON, BARON SOMERS, K.C.M.G., D.S.O., M.C. From 3 October 1930 to 22 January 1931.

Captain the Rt Hon. WILLIAM CHARLES ARCEDECKNE, BARON HUNTINGFIELD, K.C.M.G., K.ST.J. From 29 March 1938 to 24 September 1938.

Major-General SIR WINSTON JOSEPH DUGAN (afterwards 1st BARON DUGAN OF VICTORIA), G.C.M.G., C.B., D.S.O. From 5 September 1944 to 30 January 1945; 19 January 1947 to 11 March 1947.

General* SIR JOHN NORTHCOTT, K.C.M.G., C.B., M.V.O.† From 19 July 1951 to 14 December 1951; 30 July 1956 to 22 October 1956.

General SIR REGINALD ALEXANDER DALLAS BROOKS, K.C.B., K.C.M.G.‡, K.C.V.O., D.S.O., K.ST.J. From 8 January 1959 to 16 January 1959; 4 February 1961 to 3 August 1961; 5 June 1962 to 3 October 1962; 21 November 1962 to 18 December 1962.

General SIR ERIC WINSLOW WOODWARD, K.C.M.G., K.C.V.O., C.B., C.B.E., D.S.O., K.ST.J. From 16 June 1964 to 30 August 1964.

Colonel SIR HENRY ABEL SMITH, K.C.M.G., K.C.V.O., D.S.O., K.ST.J. From 7 May 1965 to 22 September 1965.

Lieut.-General SIR EDRIC MONTAGUE BASTYAN, K.C.M.G., K.C.V.O., K.B.E., C.B. From 24 April 1967 to 1 June 1967.

Governors of the States

Powers and functions. The Queen is represented in each of the States by a Governor, the office having been constituted by Letters Patent under the Great Seal of the United Kingdom of various dates. The Governors of the States exercise prerogative powers conferred on them by these Letters Patent, their Commissions of appointment, and the Governor's Instructions given them under the Royal Sign Manual and Signet or other instrument as specified in the Letters Patent. In addition, they have been invested with various statutory functions by State Constitutions and other Imperial Acts and by Acts of the Parliaments of the States.

A Governor of a State assents in the Queen's name to Bills passed by the Parliament of the State, except those reserved for the Royal assent. The latter include certain classes of Bills which are regulated by the Constitution Acts and by the Governor's Instructions. He administers the prerogative of mercy by the reprieve or pardon of criminal offenders within his jurisdiction, and may remit fines and penalties due to the Crown. In the performance of his functions generally, particularly those conferred by Statute, the Governor of a State acts on the advice of Ministers of State for the State.

Holders of office. The names of the present (December 1968) State Governors are as follows:

STATE GOVERNORS, DECEMBER 1968

New South Wales—SIR ARTHUR RODEN CUTLER, V.C., K.C.M.G., C.B.E., K.ST.J.

Victoria—MAJOR-GENERAL SIR ROHAN DELACOMBE, K.C.M.G., K.B.E., C.B., D.S.O., K.ST.J.

Queensland—SIR ALAN JAMES MANSFIELD, K.C.M.G.

South Australia—MAJOR-GENERAL SIR JAMES WILLIAM HARRISON, K.C.M.G., C.B., C.B.E.

Western Australia—MAJOR-GENERAL SIR DOUGLAS ANTHONY KENDREW, K.C.M.G., C.B., C.B.E., D.S.O.

Tasmania—LIEUT.-GENERAL SIR EDRIC MONTAGUE BASTYAN, K.C.M.G., K.C.V.O., K.B.E., C.B.

The Cabinet and executive government

Both in the Commonwealth and in the States, executive government is based on the system which was evolved in Britain in the 18th century, and which is generally known as 'Cabinet' or 'responsible' government. Its essence is that the head of the State (Her Majesty the Queen, and her representative, the Governor-General or Governor) should perform governmental acts on the advice of her Ministers; that she should choose her principal Ministers of State from members of Parliament belonging to the party, or coalition of parties, commanding a majority in the popular House; that the Ministry so chosen should be collectively responsible to that House for the government of the country; and that the Ministry should resign if it ceases to command a majority there.

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* Lieutenant-General Sir John Northcott was granted honorary rank of General while administering the Government of the Commonwealth. † K.C.V.O., 1954. ‡ G.C.M.G., 1963.

The Cabinet system operates chiefly by means of constitutional conventions, customs, or understandings, and through institutions that do not form part of the legal structure of the government at all. The Constitutions of the Commonwealth and the States make fuller legal provision for the Cabinet system than the British Constitution does—for example, by requiring that Ministers shall either be, or within a prescribed period become, members of the Legislature. In general, however, the legal structure of the executive government remains the same as it was before the establishment of the Cabinet system.

The executive power of the Commonwealth is exercisable by the Governor-General, and that of the States by the Governor. In each case he is advised by an Executive Council, which, however, meets only for certain formal purposes, as explained below. The whole policy of a Ministry is, in practice, determined by some or all of the Ministers of State, meeting without the Governor-General or Governor under the chairmanship of the Prime Minister or Premier. This group of Ministers is known as the Cabinet.

The Cabinet. This body does not form part of the legal mechanism of government. Its meetings are private and deliberative. The actual Ministers of the day alone are present, no records of the meetings are made public, and the decisions taken have, in themselves, no legal effect. In Australia until January 1956 all Ministers were members of the Cabinet. Since then, however, although in the States all Ministers are members of the Cabinet, the Commonwealth ministry is made up of twelve senior Ministers, who constitute the Cabinet, and other Ministers* of non-Cabinet rank who attend meetings of the Cabinet only when required, as, for example, when the business of the Cabinet concerns their departments. As Ministers are the leaders of the party or parties commanding a majority in the popular House, the Cabinet substantially controls, in ordinary circumstances, not only the general legislative programme of Parliament, but the whole course of Parliamentary proceedings. In effect, though not in form, the Cabinet, by reason of the fact that all Ministers are members of the Executive Council, is also the dominant element in the executive government of the country. Even in summoning, proroguing, or dissolving Parliament, the Governor-General or Governor is usually guided by the advice tendered him by the Cabinet, through the Prime Minister or Premier, though legally the discretion is vested in the Governor-General or Governor himself.

The Executive Council. This body is usually presided over by the Governor-General or Governor, the members thereof holding office during his pleasure. All Ministers of State must be members of the Executive Council. In the Commonwealth, and also in the States of Victoria and Tasmania, Ministers remain members of the Executive Council on leaving office, but are not summoned to attend its meetings, for it is an essential feature of the Cabinet system that attendance should be limited to the Ministers of the day. The meetings of the Executive Council are formal and official in character, and a record of proceedings is kept by the Secretary or Clerk. At Executive Council meetings the decisions of the Cabinet are, where necessary, given legal form, appointments made, resignations accepted, proclamations issued, and regulations and the like approved.

The appointment of Ministers. Legally, Ministers hold office during the pleasure of the Governor-General or Governor. In practice, however, the discretion of the Queen's representative in the choice of Ministers is limited by the conventions on which the Cabinet system rests. When a Ministry resigns, the Crown's custom is to send for the leader of the party which commands, or is likely to be able to command, a majority in the Lower House, and to commission him, as Prime Minister or Premier, to 'form a Ministry'—that is, to nominate other persons to be appointed as Ministers of State and to serve as his colleagues in the Cabinet.

Ministers in Upper and Lower Houses. The following table shows the distribution of Ministers in the Houses of each Parliament in December 1968.

AUSTRALIAN PARLIAMENTS: MINISTERS IN UPPER OR LOWER HOUSES
DECEMBER 1968

Ministers with seats in—	*Cwlth*	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
The Upper House .	5	2	4	(*a*)	3	3	1	18
The Lower House .	21	14	11	13	6	9	8	82
Total . .	**26**	**16**	**15**	**13**	**9**	**12**	**9**	**100**

(*a*) Abolished in 1922.

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* Fourteen from 27 February 1967

Commonwealth Ministries

Names and tenure of office, 1901 *to* 1968. The following list shows the name of each Commonwealth Ministry to hold office since 1 January 1901, and the limits of its term of office.

COMMONWEALTH MINISTRIES, 1901 TO JANUARY 1969

(i) BARTON MINISTRY, 1 January 1901 to 24 September 1903.
(ii) DEAKIN MINISTRY, 24 September 1903 to 27 April 1904.
(iii) WATSON MINISTRY, 27 April 1904 to 18 August 1904.
(iv) REID-MCLEAN MINISTRY, 18 August 1904 to 5 July 1905.
(v) DEAKIN MINISTRY, 5 July 1905 to 13 November 1908.
(vi) FISHER MINISTRY, 13 November 1908 to 2 June 1909.
(vii) DEAKIN MINISTRY, 2 June 1909 to 29 April 1910.
(viii) FISHER MINISTRY, 29 April 1910 to 24 June 1913.
(ix) COOK MINISTRY, 24 June 1913 to 17 September 1914.
(x) FISHER MINISTRY, 17 September 1914 to 27 October 1915.
(xi) HUGHES MINISTRY, 27 October 1915 to 14 November 1916.
(xii) HUGHES MINISTRY, 14 November 1916 to 17 February 1917.
(xiii) HUGHES MINISTRY, 17 February 1917 to 10 January 1918.
(xiv) HUGHES MINISTRY, 10 January 1918 to 9 February 1923.
(xv) BRUCE-PAGE MINISTRY, 9 February 1923 to 22 October 1929.
(xvi) SCULLIN MINISTRY, 22 October 1929 to 6 January 1932.
(xvii) LYONS MINISTRY, 6 January 1932 to 7 November 1938.
(xviii) LYONS MINISTRY, 7 November 1938 to 7 April 1939.
(xix) PAGE MINISTRY, 7 April 1939 to 26 April 1939.
(xx) MENZIES MINISTRY, 26 April 1939 to 14 March 1940.
(xxi) MENZIES MINISTRY, 14 March 1940 to 28 October 1940.
(xxii) MENZIES MINISTRY, 28 October 1940 to 29 August 1941.
(xxiii) FADDEN MINISTRY, 29 August 1941 to 7 October 1941.
(xxiv) CURTIN MINISTRY, 7 October 1941 to 21 September 1943.
(xxv) CURTIN MINISTRY, 21 September 1943 to 6 July 1945.
(xxvi) FORDE MINISTRY, 6 July 1945 to 13 July 1945.
(xxvii) CHIFLEY MINISTRY, 13 July 1945 to 1 November 1946.
(xxviii) CHIFLEY MINISTRY, 1 November 1946 to 19 December 1949.
(xxix) MENZIES MINISTRY, 19 December 1949 to 11 May 1951.
(xxx) MENZIES MINISTRY, 11 May 1951 to 11 January 1956.
(xxxi) MENZIES MINISTRY, 11 January 1956 to 10 December 1958.
(xxxii) MENZIES MINISTRY, 10 December 1958 to 18 December 1963.
(xxxiii) MENZIES MINISTRY, 18 December 1963 to 26 January 1966.
(xxxiv) HOLT MINISTRY, 26 January 1966 to 14 December 1966.
(xxxv) HOLT MINISTRY, 14 December 1966 to 19 December 1967.
(xxxvi) MCEWEN MINISTRY, 19 December 1967 to 10 January 1968.
(xxxvii) GORTON MINISTRY, 10 January 1968 to 28 February 1968.
(xxxviii) GORTON MINISTRY, 28 February 1968.

Names of members of each Ministry to 31 January 1969. In Year Book No. 17, 1924, the names are given of each Ministry up to the Bruce-Page Ministry (9 February 1923 to 22 October 1929), together with the names of the successive holders of portfolios therein, and issue No. 39 contains a list, commencing with the Bruce-Page Ministry, which covers the period between the date on which it assumed power, 9 February 1923, and 31 July 1951, showing the names of all persons who held office in each Ministry during that period. The names of members of subsequent Ministries are listed in successive issues of the Year Book after No. 39.

This issue shows only particulars of the second Gorton Ministry.

GORTON MINISTRY—FROM 28 FEBRUARY 1968

(The State in which each Minister's electorate is situated and party affiliation are shown in parenthesis. Party affiliation is indicated by the use of the following abbreviations: C.P.—Australian Country Party, Lib.—Liberal Party of Australia.)

**Prime Minister—*
THE RT HON. J. G. GORTON, M.P. (Vic.) (Lib.)

**Deputy Prime Minister and Minister for Trade and Industry—*
THE RT HON. J. MCEWEN, M.P. (Vic.) (C.P.)

**Treasurer—*
THE RT HON. WILLIAM MCMAHON, M.P. (N.S.W.) (Lib.)

**Minister for Defence—*
THE HON. ALLEN FAIRHALL, M.P. (N.S.W.) (Lib.)

**Minister for Primary Industry—*
THE HON. J. D. ANTHONY, M.P. (N.S.W.) (C.P.)

**Postmaster-General and Vice-President of the Executive Council—*
THE HON. A. S. HULME, M.P. (Qld) (Lib.)

**Minister for National Development—*
THE HON. DAVID FAIRBAIRN, D.F.C., M.P. (N.S.W.) (Lib.)

**Minister for Labour and National Service—*
THE HON. L. H. E. BURY, M.P. (N.S.W.) (Lib.)

**Minister for Shipping and Transport and assisting the Minister for Trade and Industry—*
THE HON. IAN SINCLAIR, M.P. (N.S.W.) (C.P.)

**Minister for Supply and Leader of the Government in the Senate—*
SENATOR THE HON. KEN ANDERSON (N.S.W.) (Lib.)

**Minister for Education and Science—*
THE HON. MALCOLM FRASER, M.P. (Vic.) (Lib.)

**Minister for External Affairs—*
THE HON. GORDON FREETH, M.P. (W.A.) (Lib.)

Minister for External Territories—
THE HON. C. E. BARNES, M.P. (Qld) (C.P.)

Minister for Civil Aviation—
THE HON. R. W. C. SWARTZ, M.B.E., E.D., M.P. (Qld) (Lib.)

Minister for Immigration—
THE HON. B. M. SNEDDEN, Q.C., M.P. (Vic.) (Lib.)

Minister for Health—
THE HON. A. J. FORBES, M.C., M.P. (S.A.) (Lib.)

Minister for Repatriation—
SENATOR THE HON. G. COLIN MCKELLAR (N.S.W.) (C.P.)

Minister for Housing—
SENATOR THE HON. DAME ANNABELLE RANKIN, D.B.E. (Qld) (Lib.)

Attorney-General—
THE HON. N. H. BOWEN, Q.C., M.P. (N.S.W.) (Lib.)

Minister for the Navy—
THE HON. C. R. KELLY, M.P. (S.A.) (Lib.)

Minister for the Interior—
THE HON. P. J. NIXON, M.P. (Vic.) (C.P.)

Minister for the Army—
THE HON. PHILLIP LYNCH, M.P. (Vic.) (Lib.)

Minister for Customs and Excise—
SENATOR THE HON. MALCOLM SCOTT (W.A.) (Lib.)

Minister for Social Services and under the Prime Minister, Minister-in-charge of Aboriginal Affairs—
THE HON. W. C. WENTWORTH, M.P. (N.S.W.) (Lib.)

Minister for Works and under the Minister for Trade and Industry, Minister-in-charge of Tourist Activities—
SENATOR THE HON. R. C. WRIGHT (Tas.) (Lib.)

Minister for Air and Leader of the House—
THE HON. G. D. ERWIN, M.P. (Vic.) (Lib.)

* Minister in the Cabinet.

Names of Ministers of State. Year Book No. 38 contains a statement listing the Commonwealth Departments in existence during the period 1 April 1925 to 31 December 1949 and the names of the Ministers of State who had administered them (pages 74–9). This is in continuation of a similar statement covering the period from the inauguration of the Commonwealth Government to 1925 which appears in Year Book No. 18.

State Ministries, December 1968

The names of the members of the Ministries in each State in December 1968 are shown in the following statement. For subsequent changes, *see* Appendix. Party affiliation is indicated in parenthesis after each name. For full party titles *see* page 66.

STATE MINISTRIES, DECEMBER 1968

NEW SOUTH WALES

Premier and Treasurer—
The Hon. R. W. Askin, M.L.A. (Lib.)

Deputy Premier, Minister for Education, and Minister for Science—
The Hon. C. B. Cutler, E.D., M.L.A. (C.P.)

Minister for Labour and Industry, Chief Secretary, and Minister for Tourism—
The Hon. E. A. Willis, M.L.A. (Lib.)

Minister for Public Works—
The Hon. D. Hughes, M.L.A. (C.P.)

Attorney-General—
The Hon. K. M. McCaw, M.L.A. (Lib.)

Minister for Local Government and Minister for Highways—
The Hon. P. H. Morton, M.L.A. (Lib.)

Minister for Decentralisation and Development, and Vice-President of the Executive Council—
The Hon. J. B. M. Fuller, M.L.C. (C.P.)

Minister for Transport—
The Hon. M. A. Morris, M.L.A. (Lib.)

Minister for Lands—
The Hon. T. L. Lewis, M.L.A. (Lib.)

Minister for Conservation—
The Hon. J. G. Beale, M.L.A. (Lib.)

Minister for Agriculture—
The Hon. G. R. Crawford, D.C.M., M.L.A. (C.P.)

Minister for Housing and Minister for Co-operative Societies—
The Hon. S. T. Stephens, M.L.A. (C.P.)

Minister of Justice—
The Hon. J. C. Maddison, M.L.A. (Lib.)

Minister for Health—
The Hon. A. H. Jago, M.L.A. (Lib.)

Minister for Mines—
The Hon. W. C. Fife, M.L.A. (Lib.)

Minister for Child Welfare and Minister for Social Welfare—
The Hon. F. M. Hewitt, M.L.C. (Lib.)

VICTORIA

Premier and Treasurer—
The Hon. Sir Henry Bolte, K.C.M.G., M.P. (Lib.)

Chief Secretary—
The Hon. Sir Arthur Rylah, K.B.E., C.M.G., E.D., M.P. (Lib.)

Minister of Agriculture—
The Hon. G. L. Chandler, C.M.G., M.L.C. (Lib.)

Minister of Education—
The Hon. L. H. S. Thompson, M.L.C. (Lib.)

Attorney-General, and Minister of Immigration—
The Hon. G. O. Reid, M.P. (Lib.)

Minister of Public Works—
The Hon. M. V. Porter, M.P. (Lib.)

Minister of Housing, Minister of Forests, and Minister for Aboriginal Affairs—
The Hon. E. R. Meagher, M.B.E., E.D., M.P. (Lib.)

Minister for Local Government—
The Hon. R. J. Hamer, E.D., M.L.C. (Lib.)

Minister for Fuel and Power, and Minister of Mines—
The Hon. J. C. M. Balfour, M.P. (Lib.)

Minister for Labour and Industry—
The Hon. J. F. Rossiter, M.P. (Lib.)

Minister of Transport—
The Hon. V. F. Wilcox, M.P. (Lib.)

Minister of Health—
The Hon. V. O. Dickie, M.L.C. (Lib.)

Minister of State Development—
The Hon. J. W. Manson, M.P. (Lib.)

Minister of Lands, Minister of Soldier Settlement, and Minister for Conservation—
The Hon. Sir William McDonald, M.P. (Lib.)

Minister of Water Supply—
The Hon. W. A. Borthwick, M.P. (Lib.)

STATE MINISTRIES, 1968—*continued*

QUEENSLAND

Premier and Minister for State Development—
The Hon. J. Bjelke-Petersen, M.L.A. (C.P.)

Treasurer—
The Hon. G. W. W. Chalk, M.L.A. (Lib.)

Minister for Mines, Main Roads, and Electricity—
The Hon. R. E. Camm, M.L.A. (C.P.)

Minister for Justice and Attorney-General—
The Hon. P. R. Delamothe, O.B.E., M.L.A. (Lib.)

Minister for Education and Cultural Activities—
The Hon. A. R. Fletcher, M.L.A. (C.P.)

Minister for Local Government and Conservation—
The Hon. H. Richter, M.L.A. (C.P.)

Minister for Primary Industries—
The Hon. J. A. Row, M.L.A. (C.P.)

Minister for Health—
The Hon. S. D. Tooth, M.L.A. (Lib.)

Minister for Labour and Tourism—
The Hon. J. D. Herbert, M.L.A. (Lib.)

Minister for Transport—
The Hon. W. E. Knox, M.L.A. (Lib.)

Minister for Industrial Development—
The Hon. F. A. Campbell, M.L.A. (Lib.)

Minister for Lands—
The Hon. V. B. Sullivan, M.L.A. (C.P.)

Minister for Works and Housing—
The Hon. A. M. Hodges, M.L.A. (C.P.)

SOUTH AUSTRALIA

Premier and Minister of Industrial Development—
The Hon. R. S. Hall, M.P. (L.C.L.)

Chief Secretary, Minister of Health and Minister of Mines—
The Hon. R. C. DeGaris, M.L.C. (L.C.L.)

Treasurer and Minister for Housing—
The Hon. G. G. Pearson, M.P. (L.C.L.)

Minister of Lands, Minister of Repatriation, Minister of Irrigation and Minister of Immigration and Tourism—
The Hon. D. N. Brookman, M.P. (L.C.L.)

Minister of Agriculture and Minister of Forests—
The Hon. C. R. Story, M.L.C. (L.C.L.)

Minister of Works, Minister of Marine and Minister of Labour and Industry—
The Hon. J. W. H. Coumbe, M.P. (L.C.L.)

Attorney-General, Minister of Social Welfare and Minister of Aboriginal Affairs—
The Hon. R. R. Millhouse, M.P. (L.C.L.)

Minister of Education—
The Hon. Joyce Steele, M.P. (L.C.L.)

Minister of Local Government and Minister of Roads and Transport—
The Hon. C. M. Hill (L.C.L.)

WESTERN AUSTRALIA

Premier, Treasurer, and Minister for Tourists—
The Hon. D. Brand, M.L.A. (Lib.*)

Deputy Premier, Minister for Agriculture, and Minister for Electricity—
The Hon. C. D. Nalder, M.L.A. (C.P.)

Minister for Industrial Development and Minister for the North-West—
The Hon. C. W. M. Court, O.B.E., M.L.A. (Lib.*)

Minister for Education and Minister for Native Welfare—
The Hon. E. H. M. Lewis, M.L.A. (C.P.)

Minister for Mines, Minister for Justice, and Leader of the Government in the Legislative Council—
The Hon. A. F. Griffith, M.L.C. (Lib.*)

Minister for Lands, Minister for Forests, and Minister for Immigration—
The Hon. W. S. Bovell, M.L.A. (Lib.*)

Minister for Works and Minister for Water Supplies—
The Hon. R. Hutchinson, D.F.C., M.L.A. (Lib.*)

Minister for Local Government, Minister for Town Planning, and Minister for Child Welfare—
The Hon. L. A. Logan, M.L.C. (C.P.)

Chief Secretary, Minister for Police, and Minister for Traffic—
The Hon. J. F. Craig, M.L.A. (C.P.)

Minister for Housing and Minister for Labour—
The Hon. D. H. O'Neil, M.L.A. (Lib.*)

Minister for Transport and Minister for Railways—
The Hon. R. J. O'Connor, M.L.A. (Lib.*)

Minister for Health, and Minister for Fisheries and Fauna—
The Hon. G. C. MacKinnon, M.L.C. (Lib.*)

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* Formerly Liberal and Country League (L.C.L.) which changed its name on 15 July 1968 to the Liberal Party of Australia (Western Australian Division) Incorporated.

STATE MINISTRIES, 1968—*continued*

TASMANIA

Premier, Treasurer, and Minister for Mines—
THE HON. E. E. REECE, M.H.A. (A.L.P.)

Deputy Premier and Attorney-General—
THE HON. R. F. FAGAN, M.H.A. (A.L.P.)

Minister for Education—
THE HON. W. A. NEILSON, M.H.A. (A.L.P.)

Minister for Lands and Works—
THE HON. D. A. CASHION, M.H.A. (A.L.P.)

Minister for Agriculture and Tourists—
THE HON. A. C. ATKINS, M.H.A. (A.L.P.)

Chief Secretary—
THE HON. B. K. MILLER, M.L.C. (A.L.P.)

Minister for Housing and Forests—
THE HON. S. V. WARD, M.H.A. (A.L.P.)

Minister for Health—
THE HON. M. G. EVERETT, Q.C., M.H.A. (A.L.P.)

Minister for Transport and Police—
THE HON. H. J. MCLOUGHLIN, M.H.A. (A.L.P.)

Leaders of the Opposition, Commonwealth and State Parliaments, December 1968

The Leader of the Opposition plays an important part in the Party system of government which operates in the Australian Parliaments. The following list gives the names of the holders of this position in each of the Parliaments in December 1968.

LEADERS OF THE OPPOSITION, DECEMBER 1968

Commonwealth—E. G. Whitlam, Q.C., M.P. (A.L.P.)
New South Wales—P. D. Hills, M.L.A. (A.L.P.)
Victoria—A. C. Holding, M.P. (A.L.P.)
Queensland—J. W. Houston, M.L.A. (A.L.P.)
South Australia—The Hon. D. A. Dunstan, Q.C., M.P. (A.L.P.)
Western Australia—The Hon. J. T. Tonkin, M.L.A. (A.L.P.)
Tasmania—The Hon. W. A. Bethune, M.H.A. (Lib.)

Numbers and salaries of Commonwealth Ministers

Under sections 65 and 66, respectively, of the Constitution of the Commonwealth the number of Ministers of State was not to exceed seven, and the annual sum payable for their salaries was not to exceed £12,000 ($24,000), each provision to operate, however, 'until the Parliament otherwise provides'.

Subsequently the number and salaries have been increased from time to time, and from December 1968 the annual sum payable for salaries has been fixed at $245,500 and the number of Ministers at twenty-six. An additional ministerial allowance of $10,300 a year has been payable to the Prime Minister since December 1968, and an additional ministerial allowance of $4,600 a year for senior Ministers and $4,000 a year for junior Ministers.

All amounts payable in the foregoing paragraphs are in addition to amounts payable as Parliamentary allowances (*see* page 67).

Parliaments and elections

The Commonwealth Parliaments

The first Parliament of the Commonwealth was convened by proclamation dated 29 April 1901 by His Excellency the Marquis of Linlithgow, then Earl of Hopetoun, Governor-General. It was opened on 9 May 1901 by H.R.H. the Duke of Cornwall and York. The Rt Hon. Sir Edmund Barton, G.C.M.G., K.C., was Prime Minister.

The following table shows the number and duration of Parliaments since federation.

COMMONWEALTH PARLIAMENTS

Number of Parliament	*Date of opening*	*Date of dissolution*
First	9 May 1901	23 November 1903
Second	2 March 1904	5 November 1906
Third	20 February 1907	19 February 1910
Fourth	1 July 1910	23 April 1913
Fifth	9 July 1913	30 July 1914(*a*)
Sixth	8 October 1914	26 March 1917
Seventh	14 June 1917	3 November 1919
Eighth	26 February 1920	6 November 1922
Ninth	28 February 1923	3 October 1925
Tenth	13 January 1926	9 October 1928
Eleventh	6 February 1929	16 September 1929
Twelfth	20 November 1929	27 November 1931
Thirteenth	17 February 1932	7 August 1934
Fourteenth	23 October 1934	21 September 1937
Fifteenth	30 November 1937	27 August 1940
Sixteenth	20 November 1940	7 July 1943
Seventeenth	23 September 1943	16 August 1946
Eighteenth	6 November 1946	31 October 1949
Nineteenth	22 February 1950	19 March 1951(*a*)
Twentieth	12 June 1951	21 April 1954
Twenty-first	4 August 1954	4 November 1955
Twenty-second	15 February 1956	14 October 1958
Twenty-third	17 February 1959	2 November 1961
Twenty-fourth	20 February 1962	1 November 1963
Twenty-fifth	25 February 1964	31 October 1966
Twenty-sixth	21 February 1967	

(*a*) A dissolution of both the Senate and the House of Representatives was granted by the Governor-General, acting on the advice of the Cabinet and under section 57 of the Constitution.

There have been twenty-five complete Parliaments since Federation. Until 1927 the Parliament met in Melbourne; it now meets in Canberra, the first meeting at Parliament House, Canberra, being opened by the Duke of York on 9 May 1927.

The twenty-fifth Parliament opened on 25 February 1964 and ended on 31 October 1966 when the House of Representatives was dissolved. Elections for the House of Representatives were held on 26 November 1966. Elections were also held on the same date to fill casual vacancies in the Senate for each of the States of New South Wales, Victoria, Queensland, and Western Australia. Particulars of electors and voting are given on page 62. For particulars of electors enrolled and of electors who voted in the several States and Territories at previous Commonwealth elections, *see* Year Book No. 52 and earlier issues.

A special article describing the Commonwealth Parliament, its functions and procedure, prepared by the Clerk of the Senate and the Clerk of the House of Representatives, appears in Year Book No. 49, pages 65–71.

Qualifications for membership and for franchise—Commonwealth Parliament

Qualifications necessary for membership of either House of the Commonwealth Parliament are possessed by any British subject, twenty-one years of age or over, who has resided in the Commonwealth for at least three years and who is, or is qualified to become, an elector of the Commonwealth. Qualifications for Commonwealth franchise are possessed by any British subject, not under twenty-one years of age and not disentitled on other grounds, who has lived in Australia for six months continuously. Residence in a subdivision for a period of one month prior to enrolment is necessary to enable a qualified person to enrol. Enrolment and voting are compulsory except that the compulsory enrolment provisions do not relate to an Aboriginal native of Australia. A member of the Defence Force on service outside Australia who is a British subject not less than 21 years of age and has lived in Australia for six months continuously is entitled to vote at Commonwealth elections, whether enrolled or not. In 1966 the franchise was extended to entitle a person who is less than twenty-one years of age, who has lived in Australia for six months continuously and who is, or has been, on 'special service' outside Australia as a member of the Defence Force, to vote at elections as if his name appeared on the roll. 'Special service' takes the same meaning as that term in the Repatriation (Special Overseas Service) Act and means, in relation to a person, service during a period when he is outside Australia and he or his unit is allotted for special duty in a special area.

The principal reasons for disqualification of persons otherwise eligible as members of either Commonwealth House are: membership of the other House, allegiance to a foreign power, being attainted of treason, being convicted and under sentence for any offence punishable by imprisonment for one year or longer, being an undischarged bankrupt or insolvent, holding an office of profit under the Crown (with certain exceptions), or having pecuniary interest in any agreement with the public service of the Commonwealth except as a member of an incorporated company of more than twenty-five persons. Persons of unsound mind, attainted of treason, convicted and under sentence for any offence punishable by imprisonment for one year or longer, or persons who are holders of temporary entry permits under the *Migration Act* 1958–1966 or are prohibited immigrants under that Act are excluded from the franchise. In the main, these or similar grounds for disqualification apply also to State Parliament membership and franchise. Aborigines are entitled to vote at both Commonwealth and State elections in all States.

Commonwealth Parliaments and elections

From the establishment of the Commonwealth until 1949 the Senate consisted of thirty-six members, six being returned by each of the original federating States. The Constitution empowers Parliament to increase or decrease the size of the Parliament, and, as the population of the Commonwealth had more than doubled since its inception, the Parliament passed the *Representation Act* 1948 which provided that there should be ten Senators from each State instead of six, increasing the total to sixty Senators, thus enlarging both Houses of Parliament and providing a representation ratio nearer to the proportion which existed at Federation.

In accordance with the Constitution the total number of members of the House of Representatives must be as nearly as practicable double that of the Senate.* Consequently, in terms of the Constitution and the Representation Act, from the date of the 1949 elections the number of members in the House of Representatives was increased from 74 to 121 (excluding the members for the internal Territories). As the States are represented in the House of Representatives on a population basis, the numbers were increased as follows: New South Wales—from 28 to 47; Victoria—from 20 to 33; Queensland—from 10 to 18; South Australia—from 6 to 10; and Western Australia—from 5 to 8. Tasmania's representation remained at 5 and the total was increased from 74 to 121. The increase in the number of members of Parliament necessitated a redistribution of seats and a redetermination of electoral boundaries. Redistributions are carried out by distribution commissioners appointed for each State. The redistributions are effected on a quota basis, but taking into account community interests, means of communication, physical features, existing boundaries, and other factors.

The population as disclosed by the Census taken on 30 June 1954 necessitated a further alteration in representation in the House of Representatives in respect of New South Wales, South Australia, and Western Australia. Representation as from the general election for the House of Representatives on 10 December 1955 has been: New South Wales 46, Victoria 33, Queensland 18, South Australia 11, Western Australia 9, Tasmania 5, the total number of members (excluding the members for the internal Territories) being increased from 121 to 122.

The population as disclosed by the Census taken on 30 June 1961 revealed that, under the provisions of the Representation Act, New South Wales, Queensland, and Western Australia would each lose one member in the House of Representatives, while Victoria would gain a member. The distribution commissioners' reports were duly laid before both Houses of Parliament, but the Government decided not to proceed with the proposals and announced that it would amend the Representation Act. In November 1964 the formula provided by Section 10 of the Representation Act for determining the number of members of the House of Representatives was amended so as to give a State an additional member for 'any portion of a quota'. The effect of that amendment would have been that at the next redistribution Victoria and South Australia would each gain one member while all other States would retain their existing representation. However, no fresh redistribution was effected prior to the 1966 Census. Resulting from the population disclosed by the 1966 Census the Chief Electoral Officer determined that the number of members of the House of Representatives to be chosen in the several States shall be: New South Wales 45, Victoria 34, Queensland 18, South Australia 12, Western Australia 9, and Tasmania 5. A redistribution of the States into electoral divisions was effected in 1968 by distribution commissioners appointed in each State, and the reports submitted by the distribution commissioners were approved by both Houses of Parliament in respect of all States in October–November 1968. Consequently this new representation will become effective at the next general election of members of the House of Representatives.

Since the general election of 1922 the Northern Territory has been represented by one member in the House of Representatives, and the Australian Capital Territory has had similar representation since the elections of 1949. The member for the Australian Capital Territory has had full voting rights since the first sitting of the twenty-sixth Parliament. In May 1968 the Northern Territory Representation Act was amended to give full voting rights to the Member for the Northern Territory effective from 15 May 1968, the day on which the Act received Royal Assent.

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* A proposal to alter the Constitution so that numbers of members of the House of Representatives might be increased without necessarily increasing the number of Senators was the subject of a referendum in March 1967, but was rejected. *See* Year Book No. 54, page 66, for results of the Referendum.

The Constitution provides for a minimum of five members for each original State. Members of the House of Representatives are elected for the duration of the Parliament, which is limited to three years. At elections for Senators the whole State constitutes the electorate. For the purpose of elections for the House of Representatives the State is divided into single electorates corresponding in number to the number of members to which the State is entitled. Further information regarding the Senate and the House of Representatives is given in earlier issues of the Year Book.

The *Commonwealth Electoral Act* 1948, introduced with the *Representation Act* 1948 to enlarge the Commonwealth Parliament (*see* page 61), changed the system of scrutiny and counting of votes in Senate elections from the alternative vote to that of proportional representation. For a description of the system, *see* Year Book No. 38, pages 82–3. The system of voting for both the Senate and the House of Representatives is preferential.

Particulars of voting at Senate elections and elections for the House of Representatives up to 1964 appear in earlier issues of the Year Book, and additional information is available in the *Statistical Returns* issued by the Chief Electoral Officer following each election.

The numbers of electors and of primary votes cast for the major political parties in each State and Territory at the latest election for each House were as follows.

COMMONWEALTH ELECTIONS, 1966 AND 1967

		Votes recorded						
State or Territory	*Electors enrolled*	*Liberal Party of Australia*	*Australian Country Party*	*Australian Labor Party*	*Australian Democratic Labor Party*	*Others*	*Informal*	*Total*
HOUSE OF REPRESENTATIVES ELECTION, 26 NOVEMBER 1966								
New South Wales	2,308,775	862,407	226,355	862,631	96,102	69,981	69,340	2,186,816
Victoria	1,702,864	622,708	130,468	548,743	197,026	66,619	60,779	1,626,343
Queensland	900,492	253,663	165,358	354,674	63,175	5,365	15,595	857,830
South Australia	585,465	296,923	..	222,828	19,281	8,089	16,220	563,341
Western Australia	433,097	160,894	32,524	168,257	28,502	2,875	16,518	409,570
Tasmania	197,666	78,684	..	96,246	11,132	289	2,849	189,200
Northern Territory	17,395	..	7,221	6,734	..	..	500	14,455
Australian Capital Territory	48,127	16,685	..	22,721	2,193	2,396	777	44,772
Australia	**6,193,881**	**2,291,964**	**561,926**	**2,282,834**	**417,411**	**155,614**	**182,578**	**5,892,327**
SENATE ELECTION, 25 NOVEMBER 1967								
New South Wales	2,328,345	891,751		989,552	96,927	69,395	151,700	2,199,325
Victoria	1,726,681	629,367		622,404	267,495	24,317	110,694	1,654,277
Queensland	899,836	348,939		369,304	110,310	..	26,440	854,993
South Australia	594,480	252,816		255,513	18,885	8,745	32,864	568,823
Western Australia	441,957	131,239	44,862	179,833	30,587	4,051	27,832	418,404
Tasmania	200,622	66,399		73,384	15,802	28,011	9,711	193,307
Australia	**6,191,921**	**2,365,373**		**2,489,990**	**540,006**	**134,519**	**359,241**	**5,889,129**

Membership at the end of 1968 was: *Senate*—Liberal Party of Australia, 21; Australian Country Party, 7; Australian Labor Party, 27; Australian Democratic Labor Party, 4; Independent, 1; *House of Representatives*—Liberal Party of Australia, 60; Australian Country Party, 21; Australian Labor Party, 42; Independent, 1.

Members of the Commonwealth Parliament

The following is a list of Senators and Members of the House of Representatives of the Commonwealth Parliament as at 1 January 1969. Changes since that date are set out in the Appendix to this volume. Party affiliation is indicated by the use of the following abbreviations:

A.D.L.P.—Australian Democratic Labour Party
A.L.P.—Australian Labor Party
C.P.—Australian Country Party
Ind.—Independent
Lib.—Liberal Party of Australia

MEMBERS OF THE COMMONWEALTH PARLIAMENT, 1 JANUARY 1969(a)

THE SENATE

President:
SENATOR THE HON. SIR ALISTER MAXWELL MCMULLIN, K.C.M.G.

Chairman of Committees:
SENATOR T. C. DRAKE-BROCKMAN, D.F.C.

Leader of the Government in the Senate:
SENATOR THE HON. K. M. ANDERSON

Leader of the Opposition in the Senate:
SENATOR L. K. MURPHY, Q.C.

Senator	*State*	*Term(b) expires 30 June*	*Senator*	*State*	*Term(b) expires 30 June*
Anderson, Hon. K. M. (Lib.)	N.S.W.	1971	McKellar, Hon. G. C. (C.P.)	N.S.W.	1974
Bishop, R. (A.L.P.)	S.A.	1974	McManus, F. P. (A.D.L.P.)	Vic.	1971
Branson, G. H. (Lib.)	W.A.	1971	McMullin, Hon. Sir Alister, K.C.M.G. (Lib.)	N.S.W.	1971
Bull, T. L., O.B.E. (C.P.)	N.S.W.	1971	Marriott, J. E. (Lib.)	Tas.	1971
Buttfield, Nancy E. (Lib.)	S.A.	1974	Maunsell, C. R. (C.P.)	Qld	1974
Byrne, C. B. (A.D.L.P.)	Qld	1974	Milliner, B. R. (A.L.P.)	Qld	1974
Cant, H. G. J. (A.L.P.)	W.A.	1971	Mulvihill, J. A. (A.L.P.)	N.S.W.	1971
Cavanagh, J. L. (A.L.P.)	S.A.	1974	Murphy, L. K., Q.C. (A.L.P.)	N.S.W.	1974
Cohen, S. H., Q.C. (A.L.P.)	Vic.	1974	O'Byrne, J. (A.L.P.)	Tas.	1971
Cormack, M.C. (Lib.)	Vic.	1974	Ormonde, J. P. (A.L.P.)	N.S.W.	1971
Cotton, R. C. (Lib.)	N.S.W.	1974	Poke, A. G. (A.L.P.)	Tas.	1974
Davidson, G. S. (Lib.)	S.A.	1971	Poyser, A. G. (A.L.P.)	Vic.	1974
Devitt, D. M. (A.L.P.)	Tas.	1971	Prowse, E. W. (C.P.)	W.A.	1974
Dittmer, F. (A.L.P.)	Qld	1971	Rae, P. E. (Lib.)	Tas.	1974
Drake-Brockman, T. C. D.F.C. (C.P.)	W.A.	1971	Rankin, Hon. Dame Annabelle, D.B.E. (Lib.)	Qld	1974
Drury, A. J. (A.L.P.)	S.A.	1971	Ridley, C. F. (A.L.P.)	S.A.	1971
Fitzgerald, J. F. (A.L.P.)	N.S.W.	1974	Scott, M. F. (Lib.)	W.A.	1971
Gair, Hon. V. C. (A.D.L.P.)	Qld	1971	Sim, J. P. (Lib.)	W.A.	1974
Georges, G. (A.L.P.)	Qld	1974	Toohey, J. P. (A.L.P.)	S.A.	1971
Greenwood, I. J. (Lib.)	Vic.	(c)	Turnbull, R. J. D. (Ind.)	Tas.	1974
Hendrickson, A. (A.L.P.)	Vic.	1971	Webster, J. J. (C.P.)	Vic.	1974
Keeffe, J. B. (A.L.P.)	Qld	1971	Wedgwood, Ivy E. (Lib.)	Vic.	1971
Kennelly, Hon. P. J. (A.L.P.)	Vic.	1971	Wheeldon, J. M. (A.L.P.)	W.A.	1971
Lacey, R. H. (A.L.P.)	Tas.	1971	Wilkinson, L. D. (A.L.P.)	W.A.	1974
Laucke, C. L. (Lib.)	S.A.	1974	Willesee, D. R. (A.L.P.)	W.A.	1974
Laught, K. A. (Lib.)	S.A.	1971	Withers, R. G. (Lib.)	W.A.	1974
Lawrie, A. G. E. (C.P.)	Qld	1971	Wood, I. A. C. (Lib.)	Qld	1971
Lillico, A. E. D. (Lib.)	Tas.	1971	Wriedt, K. S. (A.L.P.)	Tas.	1974
Little, J. A. (A.D.L.P.)	Vic.	1974	Wright, R. C. (Lib.)	Tas.	1974
McClelland, D. (A.L.P.)	N.S.W.	1974	Young, H. W. (Lib.)	S.A.	1974

(a) For later changes *see* Appendix. (b) Senators are elected for a term of six years on a rotational basis; the terms of half the Senators expire every third year. (c) Filling casual vacancy.

MEMBERS OF THE COMMONWEALTH PARLIAMENT 1 JANUARY 1969(*a*)—*continued*

THE HOUSE OF REPRESENTATIVES

(Triennial Parliaments—Last General Election
26 November 1966)

Speaker:
THE HON. W. J. ASTON, M.P.

Chairman of Committees:
P. E. LUCOCK, M.P.

Leader of the Opposition:
E. G. WHITLAM, Q.C., M.P.

Member	*Division*
Adermann, Rt Hon. C. F. (C.P.)	Fisher (Q.)
Allan, A. I. (C.P.)	Gwydir (N.S.W.)
Anthony, Hon. J. D. (C.P.)	Richmond (N.S.W.)
Armstrong, A. A., M.C. (C.P.)	Riverina (N.S.W.)
Arthur, W. T. (Lib.)	Barton (N.S.W.)
Aston, Hon. W. J. (Lib.)	Phillip (N.S.W.)
Barnard, L. H. (A.L.P.)	Bass (T.)
Barnes, Hon. C. E. (C.P.)	McPherson (Q.)
Bate, H. J. (Lib.)	Macarthur (N.S.W.)
Beaton, N. L. (A.L.P.)	Bendigo (V.)
Beazley, K. E. (A.L.P.)	Fremantle (W.A.)
Benson, S. J., R.D. (Ind.)	Batman (V.)
Birrell, F. R. (A.L.P.)	Port Adelaide (S.A.)
Bonnett, R. N. (Lib.)	Herbert (Q.)
Bosman, L. L. (Lib.)	St. George (N.S.W.)
Bowen, Hon. N. H., Q.C. (Lib.)	Parramatta (N.S.W.)
Bridges-Maxwell, C. W. (Lib.)	Robertson (N.S.W.)
Brownbill, Miss K. C. M. (Lib.)	Kingston (S.A.)
Bryant, G.M. (A.L.P.)	Wills (V.)
Buchanan, A. A. (Lib.)	McMillan (V.)
Bury, Hon. L. H. E. (Lib.)	Wentworth (N.S.W.)
Cairns, J. F. (A.L.P.)	Yarra (V.)
Cairns, K. M. K. (Lib.)	Lilley (Q.)
Calder, S. E., D.F.C. (C.P.)	Northern Territory
Calwell, Rt Hon. A. A. (A.L.P.)	Melbourne (V.)
Cameron, C. R. (A.L.P.)	Hindmarsh (S.A.)
Cameron, D. M. (Lib.)	Griffith (Q.)
Chaney, Hon. F. C., A.F.C. (Lib.)	Perth (W.A.)
Chipp, Hon. D. L. (Lib.)	Higinbotham (V.)
Clark, J. J. (A.L.P.)	Darling (N.S.W.)
Cleaver, R. (Lib.)	Swan (W.A.)
Collard, F. W. (A.L.P.)	Kalgoorlie (W.A.)
Connor, R. F. X. (A.L.P.)	Cunningham (N.S.W.)
Cope, J. F. (A.L.P.)	Watson (N.S.W.)
Corbett, J. (C.P.)	Maranoa (Q.)
Costa, D. E. (A.L.P.)	Banks (N.S.W.)
Courtnay, F. (A.L.P.)	Darebin (V.)
Cramer, Hon. Sir John (Lib.)	Bennelong (N.S.W.)
Crean, F. (A.L.P.)	Melbourne Ports (V.)
Cross, M. D. (A.L.P.)	Brisbane (Q.)
Curtin, D. J. (A.L.P.)	Kingsford-Smith (N.S.W.)
Daly, F. M. (A.L.P.)	Grayndler (N.S.W.)
Davies, R. (A.L.P.)	Braddon (T.)
Devine, L. T. (A.L.P.)	East Sydney (N.S.W.)
Dobie, J. D. M. (Lib.)	Hughes (N.S.W.)
Drury, E. N. (Lib.)	Ryan (Q.)
Duthie, G. W. A. (A.L.P.)	Wilmot (T.)
England, J. A., E.D. (C.P.)	Calare (N.S.W.)
Erwin, G. D. (Lib.)	Ballaarat (V.)
Everingham,D.N.(A.L.P.)	Capricornia (Q.)
Failes, L. J. (C.P.)	Lawson (N.S.W.)
Fairbairn, Hon. D. E., D.F.C. (Lib.)	Farrer (N.S.W.)
Fairhall, Hon. A. (Lib.)	Paterson (N.S.W.)
Forbes, Hon. A. J., M.C. (Lib.)	Barker (S.A.)
Fox, E. M. C. (Lib.)	Henty (V.)
Fraser, Hon. J. M. (Lib.)	Wannon (V.)
Fraser, J. R. (A.L.P.)	Aust. Cap. Terr.
Freeth, Hon. G. (Lib.)	Forrest (W.A.)
Fulton, W. J. (A.L.P.)	Leichhardt (Q.)
Gibbs, W. T. (Lib.)	Bowman (Q.)
Gibson, A. (Lib.)	Denison (T.)
Giles, G. O'H. (Lib.)	Angas (S.A.)
Gorton, Rt Hon. J. G. (Lib.)	Higgins (V.)
Graham, B. W. (Lib.)	North Sydney (N.S.W.)
Griffiths, C. E. (A.L.P.)	Shortland (N.S.W.)
Hallett, J. M. (C.P.)	Canning (W.A.)
Hansen, B. P. (A.L.P.)	Wide Bay (Q.)
Harrison, E. J. (A.L.P.)	Blaxland (N.S.W.)
Hasluck, Rt Hon. P. M. C. (Lib.)*	Curtin (W.A.)

(*a*) For later changes *see* Appendix.

* Resigned 11 February 1969 to become Governor-General.

MEMBERS OF THE COMMONWEALTH PARLIAMENT 1 JANUARY 1969(*a*)—*continued*

THE HOUSE OF REPRESENTATIVES—*continued*

Member	*Division*	*Member*	*Division*
Haworth, Hon. W. C. (Lib.)	Isaacs (V.)	Minogue, D. (A.L.P.)	West Sydney (N.S.W.)
Hayden, W. G. (A.L.P.)	Oxley (Q.)	Munro, D. R. R. (Lib.)	Eden-Monaro (N.S.W.)
Holten, R. McN. (C.P.)	Indi (V.)	Nicholls, M. H. (A.L.P.)	Bonython (S.A.)
Howson, Hon. P. (Lib.)	Fawkner (V.)	Nixon, Hon. P. J. (C.P.)	Gippsland (V.)
Hughes, T. E. F., Q.C. (Lib.)	Parkes (N.S.W.)	O'Connor, W. P. (A.L.P.)	Dalley (N.S.W.)
Hulme, Hon. A. S. (Lib.)	Petrie (Q.)	Patterson, R. A. (A.L.P.)	Dawson (Q.)
Irwin, L. H., M.B.E. (Lib.)	Mitchell (N.S.W.)	Peacock, A. S. (Lib.)	Kooyong (V.)
James, A. W. (A.L.P.)	Hunter (N.S.W.)	Pearsall, T. G. (Lib.)	Franklin (Tas.)
Jarman, A. W. (Lib.)	Deakin (V.)	Peters, E. W. (A.L.P.)	Scullin (V.)
Jess, J. D. (Lib.)	La Trobe (V.)	Pettitt, J. A. (C.P.)	Hume (N.S.W.)
Jessop, D. S. (Lib.)	Grey (S.A.)	Robinson, I. L. (C.P.)	Cowper (N.S.W.)
Jones, A. T. (Lib.)	Adelaide (S.A.)	Scholes, G. G. D. (A.L.P.)	Corio (V.)
Jones, C. K. (A.L.P.)	Newcastle (N.S.W.)	Sinclair, Hon. I. McC. (C.P.)	New England (N.S.W.)
Katter, R. C. (C.P.)	Kennedy (Q.)	Snedden, Hon. B. M., Q.C. (Lib.)	Bruce (V.)
Kelly, Hon. C. R. (Lib.)	Wakefield (S.A.)	Stewart, F. E. (A.L.P.)	Lang (N.S.W.)
Kent Hughes, Hon. Sir Wilfrid, K.B.E., M.V.O., M.C., E.D. (Lib.)	Chisholm (V.)	St. John, E. H., Q.C. (Lib.)	Warringah (N.S.W.)
Killen, D. J. (Lib.)	Moreton (Q.)	Stokes, P. W. C., E.D. (Lib.)	Maribyrnong (V.)
King, R. S. (C.P.)	Wimmera (V.)	Street, A. A. (Lib.)	Corangamite (V.)
Lee, M. W. (Lib.)	Lalor (Vic.)	Swartz, Hon. R. W. C., M.B.E., E.D. (Lib.)	Darling Downs (Q.)
Luchetti, A. S. (A.L.P.)	Macquarie (N.S.W.)	Turnbull, W. G. (C.P.)	Mallee (V.)
Lucock, P. E. (C.P.)	Lyne (N.S.W.)	Turner, H. B. (Lib.)	Bradfield (N.S.W.)
Lynch, Hon. P. R. (Lib.)	Flinders (Vic.)	Uren, T. (A.L.P.)	Reid (N.S.W.)
Mackay, M. G. (Lib.)	Evans (N.S.W.)	Webb, C. H. (A.L.P.)	Stirling (W.A.)
Maisey, D. W. (C.P.)	Moore (W.A.)	Wentworth, Hon. W. C. (Lib.)	Mackellar (N.S.W.)
McEwen, Rt Hon. J. (C.P.)	Murray (V.)	Whitlam, E. G., Q.C. (A.L.P.)	Werriwa (N.S.W.)
McIvor, H. J. (A.L.P.)	Gellibrand (V.)	Whittorn, R. H. (Lib.)	Balaclava (V.)
McLeay, J. E. (Lib.)	Boothby (S.A.)	Wilson, I. B. C. (Lib.)	Sturt (S.A.)
McMahon, Rt Hon. W. (Lib.)	Lowe (N.S.W.)		

(*a*) For later changes *see* Appendix.

Commonwealth referendums

In accordance with section 128 of the Constitution any proposed law for the alteration of the Constitution, in addition to being passed by an absolute majority of each House of Parliament, must be submitted to a referendum of the electors in each State, and must be approved also by a majority of the electors in a majority of the States and by a majority of all the electors who voted, before it can be presented for Royal Assent. Twenty-six such proposals have so far been submitted to referendums and the consent of the electors has been received in five cases, the first in relation to the election of Senators in 1906, the second and third in respect of State Debts—one in 1910 and the other in 1928, the fourth in respect of Social Services in 1946, and the fifth in respect of Aborigines in 1967. In addition to referendums for alteration of the Constitution, other Commonwealth referendums have been held, two prior to Federation regarding the proposed Constitution and two regarding military service during the 1914–18 War. For details of earlier referendums *see* Year Book No. 52, pages 66–8.

On 1 March 1967 two Bills were introduced in the House of Representatives to alter the Constitution, one to enable the number of members of the House of Representatives to be increased without necessarily increasing the number of Senators, the other to enable the Aboriginal people to be counted in reckoning the population and to omit certain words relating to the Aboriginal race which some people felt were discriminatory. The proposed laws, after being passed by both Houses of Parliament, were submitted to the electors of the States at referendums held on 27 May 1967. At the referendums the electors voted in all States in favour of the proposal regarding Aboriginals, but rejected in all States but New South Wales the proposal for increasing the number of members of the House of Representatives. For a summary of the results of the voting on each of the proposals *see* Year Book No. 54, page 66.

Consequent upon obtaining the approval of the electors, the Constitution Alteration (Aboriginals) was assented to on 10 August 1967. Section 51 of the Constitution is thereby altered by omitting from paragraph (xxvi) the words 'other than the aboriginal race in any State', and Section 127 of the Constitution is thereby repealed.

The Parliaments of the States

This chapter contains summarised information on the Parliaments of each State, the numbers of Houses and members, and salaries payable. For greater detail, including some historical material, reference should be made to earlier Year Books, particularly No. 50, pages 69–72. Recent changes have been reported in successive issues of the Year Book.

Membership of State Parliaments. The following table shows the party distribution in each of the various State Parliaments at the end of 1968.

STATE PARLIAMENTS: MEMBERSHIP, BY PARTY AFFILIATION, 31 DECEMBER 1968

Party	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*
		UPPER HOUSE				
Australian Country Party (C.P.)	12	9	..	..	8	..
Australian Labor Party (A.L.P.)	28	9	..	4	10	2
Independent (Ind.)	..	..	..	..	..	(*a*)17
Independent Labor (Ind. Lab.)	6	..	..	..	..	..
Liberal and Country League (L.C.L.)	..	..	..	16	..	..
Liberal Party of Australia (Lib.)	14	17	..	..	(*b*)12	..
Total	**60**	**35**	(*c*)	**20**	**30**	**19**
		LOWER HOUSE				
Australian Centre Party (A.C.P.)	..	..	..	..	..	1
Australian Country Party (C.P.)	17	12	26	..	9	..
Australian Labor Party (A.L.P.)	39	16	27	19	23	19
Independent (Ind.)	2	..	3	1	..	..
Independent Labor (Ind. Lab.)	..	1	..	..	..	..
Independent Liberal (Ind. Lib.)	..	..	1	..	..	..
Liberal and Country League (L.C.L.)	..	..	..	19	..	..
Liberal Party of Australia (Lib.)	36	44	19	..	(*b*)19	15
North Queensland Labor Party (N.Q.L.P.)	..	..	1	..	..	..
Queensland Labor Party (Q.L.P)	..	..	1	..	..	..
Total	**94**	**73**	**78**	**39**	**50**	**35**

(*a*) In Legislative Council elections only the A.L.P. normally endorses candidates. (*b*) Formerly Liberal and Country League, which changed its name on 15 July 1968 to the Liberal Party of Australia (Western Australian Division) Incorporated. (*c*) Upper House abolished in 1922.

The Australian Country Party: Queensland, and the Country Party of Western Australia are shown above as the Australian Country Party, since they are affiliated with the Federal body.

For corresponding particulars for the Commonwealth Parliament, *see* page 62.

Number and salary of members of the legislatures, Australian Parliaments, December 1968

AUSTRALIAN PARLIAMENTS: MEMBERS AND ANNUAL SALARIES, 31 DECEMBER 1968

Members in—	*Cwlth*	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
			NUMBER OF MEMBERS					
Upper House . .	60	60	35	(*a*)	20	30	19	224
Lower House . .	124	94	73	78	39	51	35	494
Total . .	**184**	**154**	**108**	**78**	**59**	**81**	**54**	**718**
			ANNUAL SALARY ($)					
Upper House . .	(*b*)9,500	(*c*)2,040	(*d*)7,750	(*a*)	(*e*)6,500	(*f*)7,500	(*g*)6,000	..
Lower House . .	(*b*)9,500	(*h*)6,840	(*d*)7,750	(*i*)7,560	(*e*)6,500	(*f*)7,500	(*g*)6,000	..

(*a*) Abolished in 1922. (*b*) Plus expense allowances—Senators, $2,650; Members of the House of Representatives, city electorates, $2,750, country electorates, $3,350. Certain additional allowances are also provided for holders of parliamentary offices, etc. (*c*) Plus allowances of $1,440. An additional $10 per day is payable to members who live outside the metropolitan area. (*d*) Plus allowances from $2,000 for metropolitan to $2,400 for urban, $2,800 for inner country, and $3,100 for outer country electorates. (*e*) Plus allowance varying from $1,200 to $1,900 depending on distance from Adelaide. (*f*)Plus expense reimbursement ranging from $1,600 for a metropolitan member to $3,300 for a north province member. (*g*) Plus allowance according to area of electorate and distance from the capital varying from $600 to $1,400 in the case of the Legislative Council, and from $1,100 to $2,100 in the case of the House of Assembly. (*h*) Plus allowance varying from $1,620 to $2,400 according to location of electorate. (*i*) Plus individual electoral allowances ranging from $1,245 to $2,970.

Cost of parliamentary government

The table below shows, in broad groups, the expenditure incurred in the operation of the parliamentary system in Australia, comprising the Governor-General and Governors, the Ministries, the Upper and Lower Houses of Parliament, and electoral activities; *it does not attempt to cover the expenditure on Commonwealth and State administration generally.* Only broad groups are shown, but even these are not entirely comparable because of differences in accounting procedures and in the presentation of accounts. A very large part of the expenditure under the head of Governor-General or Governor represents official services entirely outside the Governor's personal interest, carried out at the request of the Government. The item includes salaries of Government House staffs and maintenance of residences, official establishments, grounds, etc., and expenditure on capital works and services.

COST OF PARLIAMENTARY GOVERNMENT, 1967-68
($'000)

Expenditure group	*Cwlth*	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
Governor-General or Governor(*a*)	(*b*)576	148	314	152	108	86	126	1,510
Ministry(*c*)	978	283	90	116	118	184	172	1,942
Parliament—								
Upper House(*d*) . . .	654	271	303	..	148	285	133	1,793
Lower House(*d*) . . .	1,321	834	586	733	293	393	221	4,381
Both Houses(*e*) . . .	2,881	990	692	374	543	433	143	6,057
Miscellaneous(*f*) . . .	1,463	262	118	82	78	41	41	2,085
Total, Parliament . .	*6,319*	*2,358*	*1,698*	*1,189*	*1,062*	*1,152*	*539*	*14,317*
Electoral(*g*)	4,749	587	154	133	233	360	58	6,273
Royal Commissions, Select Committees, etc. . . .	75	3	41	..	47	17	34	217
Grand total . . .	**12,697**	**3,379**	**2,297**	**1,590**	**1,568**	**1,800**	**929**	**24,260**

(*a*) Salaries and other expenses, including maintenance of house and grounds. (*b*) Includes official establishments, $120.793. (*c*) Salaries as ministers, and travelling and other expenses. (*d*) Allowances to members (including ministers' salaries as members), travelling and other expenses. (*e*) Government contribution to members' superannuation funds, printing, reporting staff, library, etc. (*f*) Services, furniture, stores, etc. (*g*) Salaries, cost of elections, etc.

COST OF PARLIAMENTARY GOVERNMENT, 1963-64 TO 1967-68

Year	*Cwlth*	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
				TOTAL ($'000)				
1963–64	8,015	2,112	1,837	1,292	1,019	1,308	670	16,252
1964–65	8,939	2,426	1,995	1,299	1,177	1,498	740	18,074
1965–66	8,897	2,494	1,985	1,546	1,285	1,451	779	18,438
1966–67	12,028	3,105	2,489	1,609	1,540	1,408	805	22,983
1967–68	12,697	3,379	2,297	1,590	1,568	1,800	929	24,260
				PER HEAD OF POPULATION ($)				
1963–64	0.72	0.52	0.60	0.81	1.00	1.64	1.85	1.47
1964–65	0.79	0.59	0.64	0.80	1.12	1.83	2.02	1.60
1965–66	0.77	0.59	0.62	0.93	1.19	1.73	2.11	1.60
1966–67	1.03	0.73	0.77	0.95	1.39	1.63	2.15	1.96
1967–68	1.06	0.78	0.70	0.93	1.40	2.02	2.45	2.03

Commonwealth Government Departments

In Year Book No. 49 (pages 87–98) a list appears of the Commonwealth Government Departments, giving particulars of each Department, as at the end of 1962, of the principal matters dealt with and the Acts administered by the Minister concerned. Changes made during 1963 and 1966 are shown, respectively, on page 83 of Year Book No. 50 and page 74 of Year Book No. 53. Changes made during 1968 are shown in the Appendix to Year Book No. 54 (pages 1276–7). For detailed information on the organisation of the Departments and Agencies of the Commonwealth Government *see* The *Commonwealth Directory* (latest issue 1968).

Enactments of the Parliaments

In the Commonwealth all laws are enacted in the name of the Sovereign, the Senate, and the House of Representatives. The subjects with respect to which the Commonwealth Parliament is empowered to make laws are enumerated in the Constitution. In the States other than South Australia and Tasmania laws are enacted in the name of the Sovereign by and with the consent of the Legislative Council (except in Queensland) and Legislative Assembly. In South Australia and Tasmania laws are enacted in the name of the Governor of the State, with the advice and consent of the Parliament in the case of South Australia, and of the Legislative Council and House of Assembly in the case of Tasmania. Generally, assent to Bills passed by the legislatures is given by the Governor-General or State Governor acting on behalf of, and in the name of, the Sovereign. In certain special cases Bills are reserved for the Royal assent. The Parliaments of the States are empowered generally, subject to the Commonwealth Constitution, to make laws in and for their respective States in all cases whatsoever. Subject to certain limitations they may alter, repeal, or vary their Constitutions. Where a law of a State is inconsistent with a law of the Commonwealth the latter prevails, and the former is to the extent of the inconsistency invalid.

The course of Commonwealth legislation

The actual legislation by the Commonwealth Parliament during 1968 is indicated in alphabetical order in *The Acts of the Parliament of the Commonwealth of Australia passed during the year* 1968 *in the Second Session of the Twenty-sixth Parliament of the Commonwealth, with Appendix, Tables and Index*. A chronological table of Acts passed from 1901 to 1968 showing how they are affected by subsequent legislation or lapse of time is also given, and, further, a table of Commonwealth legislation passed from 1901 to 1968 in relation to the several provisions of the Constitution is furnished in the same volume. Reference should be made to these for complete information.

The Acts passed by the Commonwealth Parliament during the year 1968 are listed on pp. 69–74. In many cases the title of the Act indicates the general scope of the Act, but brief explanatory notes have been added where necessary. Appropriate chapters of this Year Book should be referred to for further information which may be available there.

The total enactments of the Commonwealth Parliament for a number of years at fairly even intervals since 1901 show a general increase. Seventeen Acts were passed in 1901, 36 in 1914, 38 in 1927, 87 in 1939, 109 in 1952, 156 in 1965, and 157 in 1968.

Commonwealth legislation passed during 1968

Aboriginal Enterprises (Assistance) Act 1968 (No. 154) provided for assistance in the establishment and development of business enterprises by Aborigines.

Airline Equipment (Loan Guarantee) Act 1968 (No. 131) authorised the Treasurer to guarantee the repayment of loans arranged by Ansett Transport Industries in financing the purchase of a Boeing 727 aircraft and associated equipment.

Air Navigation (Charges) Act 1968 (No. 84) increased the rates of charges payable by the operators of aircraft for the use of Commonwealth aerodromes and air navigation facilities.

Apple and Pear Export Charges Act 1968 (No. 117).

Appropriation Act (No. 3) 1967–68 (No. 20); *Appropriation Act* (No. 4) 1967–68 (No. 21); *Appropriation Act* (No. 1) 1968–69 (No. 80); *Appropriation Act* (No. 2) 1968–69 (No. 81).

Australian Capital Territory Supreme Court Act 1968 (No. 156) amended the *Australian Capital Territory Supreme Court Act* 1933–1966, providing for a court of three or more judges to deal with matters of admission, suspension, striking off and disciplining of legal practitioners.

Australian Coastal Shipping Commission Act 1968 (No. 145) amended sections sixteen, eighteen and nineteen of, and the Third Schedule to, the *Australian Coastal Shipping Commission Act* 1956–1966, to allow the Australian Coastal Shipping Commission to enter into joint ventures and arrangements with other enterprises.

Australian Universities Commission Act 1968 (No. 129) provided for the employment under the Public Service Act of staff of the Australian Universities Commission.

Bankruptcy Act 1968 (No. 121) amended sections of the *Bankruptcy Act* 1966, to facilitate the administration of the Act.

Beer Excise Act 1968 (No. 19)*.

Beer Excise Act Repeal Act 1968 (No. 107)†.

Broadcasting and Television Act 1968 (No. 69) amended section 128 of the *Broadcasting and Television Act* 1942–1967 to increase the fee for a television viewers' licence from $12 to $14 and for a combined radio and television licence from $17 to $20.

Canned Fruit Excise Act 1968 (No. 17)*.

Canned Fruit Excise Act Repeal Act 1968 (No. 108)†.

Canned Fruits Export Marketing Act 1968 (No. 37) amended the *Canned Fruits Export Marketing Act* 1963–1966 to give the Australian Canned Fruits Board power to borrow money from the Reserve Bank.

Coal Excise Act 1968 (No. 18)*.

Coal Excise Act (No. 2) 1968 (No. 76) increased the excise on coal in order to raise additional revenue to meet increased costs of long service leave for employees in the black coal mining industry.

Commonwealth Banks Act 1968 (No. 144) amended the *Commonwealth Banks Act* 1959–1966, allowing the permanent employment of married women by the Commonwealth Banking Corporation, allowing officers appeal against disciplinary action, and repealing section fifty-four of the Act which exempted from State stamp duties cheques drawn by customers of the Commonwealth Savings Bank.

Commonwealth Employees' Compensation Act 1968 (No. 123) increased the amounts of weekly payments of compensation payable to, and in respect of, employees of the Commonwealth.

Commonwealth Employees' Furlough Act 1968 (No. 26) amended the *Commonwealth Employees' Furlough Act* 1943–1967, providing for the granting of long service leave to seamen on the basis of service as a seaman in the maritime industry rather than on the basis of service with one employer.

Commonwealth Employees' Furlough Act (No. 2) 1968 (No. 58) amended the *Commonwealth Employees' Furlough Act* 1943–1967, as amended by the *Commonwealth Employees' Furlough Act* 1968, to reduce the qualifying period for furlough entitlement.

Commonwealth Railways Act 1968 (No. 27) repealed sections seventy-eight, seventy-nine and eighty-one of the *Commonwealth Railways Act* 1917–1966 to remove certain privileges of the Commonwealth Railways Commissioner and his employees in respect of legal action.

Conciliation and Arbitration Act 1968 (No. 38) increased the salaries of Senior Commissioners, Commissioners and Conciliators holding office under the *Conciliation and Arbitration Act* 1904–1967.

For footnotes *see* page 74.

Commonwealth legislation passed during 1968—continued

Continental Shelf (*Living Natural Resources*) *Act* 1968 (No. 149)‡ enabled the introduction of measures to conserve the living sedentary organisms of the Great Barrier Reef beyond territorial limits.

Copyright Act 1968 (No. 63) provided the first complete revision of copyright law in Australia for 56 years.

Customs Act 1968 (No. 14)*§; *Customs Act* (No. 2) 1968 (No. 104)||; *Customs Tariff Act* 1968 (No. 39); *Customs Tariff Act* (No. 2) 1968 (No. 83); *Customs Tariff Validation Act* 1968 (No. 137).

Defence Forces Retirement Benefits Act 1968 (No. 55) amended the *Defence Forces Retirement Benefits Act* 1948–1966, extending the membership of the fund to include some members of the defence force not previously included.

Defence Forces Retirement Benefits Act (No. 2) 1968 (No. 56) amended the *Defence Forces Retirement Benefits Act* 1948–1966, as amended by the *Defence Forces Retirement Benefits Act* 1968, to enable members of the Defence Forces who transfer to a Reserve or Supplementary Force to continue to contribute to the Fund.

Defence Forces Retirement Benefits Act (No. 3) 1968 (No. 128) provided for members of the defence force under eighteen years of age to contribute to the Defence Forces Retirement Benefits Fund.

Defence (*Re-establishment*) *Act* 1968 (No. 10) amended the *Defence* (*Re-establishment*) *Act* 1965–1967, extending from two years to two years three months the period after which national servicemen are entitled to return to their previous position of employment.

Designs Act 1968 (No. 64) amended the *Designs Act* 1906–1967, providing that the owner of the copyright for an artistic work may register it under the *Designs Act*; that the registered proprietor of a design may subsequently register it in respect of additional articles; and excluding from registration designs for articles which are primarily literary or artistic in character.

Distillation Act 1968 (No. 16)*; *Distillation Act* (No. 2) 1968 (No. 106)*.

Excise Act 1968 (No. 15)*§; *Excise Act* (No. 2) 1968 (No. 105)||.

Excise Tariff 1968 (No. 74); *Excise Tariff* (No. 2) 1968 (No. 75).

Extradition (*Commonwealth Countries*) *Act* 1968 (No. 111)¶; *Extradition* (*Foreign States*) *Act* 1968 (No. 112)¶.

Fisheries Act 1968 (No. 150)‡, amended section four of the *Fisheries Act* 1952–1967, complementing the *Continental Shelf* (*Living Natural Resources*) *Act* 1968 (*see above*).

Gold-Mining Industry Assistance Act 1968 (No. 119) amended the *Gold Mining Industry Assistance Act* 1954–1966, liberalising the present treatment of receipts by subsidised producers from sales of gold.

Income Tax Act 1968 (No. 72); *Income Tax Assessment Act* 1968 (No. 4); *Income Tax Assessment Act* (No. 2) 1968 (No. 60); *Income Tax Assessment Act* (No. 3) 1968 (No. 70); *Income Tax Assessment Act* (No. 4) 1968 (No. 87); *Income Tax Assessment Act* (No. 5) 1968 (No. 148); *Income Tax* (*Partnerships and Trusts*) *Act* 1968 (No. 73).

Income Tax (*International Agreements*) *Act* 1968 (No. 3) amended the *Income Tax* (*International Agreements*) *Act* 1953–1967, introducing a new double taxation agreement between Australia and the United Kingdom.

International Development Association (*Additional Contribution*) *Act* 1968 (No. 45) approved the payment by Australia of a further contribution to the International Development Association.

International Monetary Agreements Act 1968 (No. 130) enabled Australia to accept amendments to the Articles of Agreement of the International Monetary Fund.

Judges' Pensions Act 1968 (No. 151).

Judiciary Act 1968 (No. 134) amended the *Judiciary Act* to abolish appeal by special leave to the Privy Council from a State Supreme Court exercising Federal Jurisdiction (*see also* the *Privy Council* (*Limitation of Appeals*) *Act* 1968), and to ensure that the conditions of section thirty-nine (whereby the State courts are at present invested with federal jurisdiction 'within the limits of their several jurisdictions') of the *Judiciary Act* apply to all Commonwealth legislation unless other provision is made by the legislation concerned.

Land Acquisition (*Defence*) *Act* 1968 (No. 136) provided for the acquisition by the Commonwealth of land in the Holsworthy district of New South Wales for Army training purposes.

For footnotes *see* page 74.

Commonwealth legislation passed during 1968—continued

Law Officers Act 1968 (No. 152) amended section sixteen of the *Law Officers Act* 1964 to provide that, if a person who at any time held the office of Solicitor-General of the Commonwealth is appointed as a judge, his service as Solicitor-General is counted as service as a judge for pension entitlements for him and his family (*see also* the *Judges' Pensions Act* 1968).

Livestock Slaughter Levy Act 1968 (No. 140)**.

Livestock Slaughter Levy Collection Act 1968 (No. 141)**.

Loan Act 1968 (No. 40) amended the *Loan Act* 1967, authorising the borrowing of $A300m for expenditure on Defence Services.

Loan Act (No. 2) 1968 (No. 135).

Loan (Airlines Equipment) Act 1968 (No. 46) approved the raising of 16.8m Deutsche marks ($A3.75m) for the Australian National Airlines Commission.

Loan (Defence) Act 1968 (No. 133) approved the raising of $US75m ($A67m) to assist in financing the purchase of 24 F111C aircraft and associated equipment.

Loan (Housing) Act 1968 (No. 79) authorised the raising and expending of $126m for advances to the States for housing.

Loan (Housing) Act (No. 2) 1968 (No. 122) authorised the advancing of the proceeds (200m Deutsche marks and $A126m) of two recent loans to the States for housing.

Loan (Qantas Airways Limited) Act 1968 (No. 132) approved the raising of $US53m ($A47.3m) for Qantas Airways Limited to assist in financing the purchase of four Boeing 747 'Jumbo Jets'.

Loan (War Service Land Settlement) Act 1968 (No. 85) authorised the raising of $A5.5m for financial assistance to the States of South Australia, Western Australia and Tasmania in connection with War Service Land Settlement.

Loans (Australian National Airlines Commission) Act 1968 (No. 153) approved the borrowing of 9.9m Swiss francs ($A2m) and $US2.49m ($A2.2m) for the Australian National Airlines Commission to assist in financing the purchase of a Boeing 727 aircraft.

Loans Securities Act 1968 (No. 28) amended the *Loan Securities Act* 1919–1959 to enable the introduction of simplified procedures for transferring Commonwealth stock already on issue in London.

Meat Legislation Repeal Act 1968 (No. 143) repealed certain legislation relating to meat, which had lapsed because of the expiration of the Fifteen Year Meat Agreement between Australia and the United Kingdom.

Meat Research Act 1968 (No. 142)**.

Ministers of State Act 1968 (No. 102) increased the salaries and allowances of Commonwealth Ministers of State.

National Health Act 1968 (No. 100) amended the *National Health Act* 1953–1967, widening the functions of the national health scheme to include assistance to (i) cases of chronic ailments, etc., (ii) cases where intensive nursing care is required, and (iii) handicapped children, to authorise the Minister of Health to supply measles vaccine, and to assist persons who have lost pensioner medical service entitlement.

National Service Act 1968 (No. 51) amended the *National Service Act* 1951–1966 to provide for action against persons seeking to avoid national service and for the increase of fines associated with the Act.

Native Members of the Forces Benefits Act 1968 (No. 8)‡.

Naval Defence Act 1968 (No. 24) amended the *Naval Defence Act* 1910–1966 to empower the Naval Board to determine terms and conditions of service of persons employed in a civilian capacity.

Navigation Act 1968 (No. 62) amended the *Navigation Act* 1912–1967 to give effect to the International Convention on Load Lines, 1966.

New South Wales Grant (Flood Mitigation) Act 1968 (No. 2) amended section five of the *New South Wales Grant (Flood Mitigation) Act* 1964–1966 to raise the limit of Commonwealth assistance payable from $5.5 million to $8 million.

Northern Territory (Administration) Act 1968 (No. 5) provided that, if an officer of the Commonwealth Public Service is appointed to the office of Administrator of the Northern Territory, he will be entitled to retain his existing and accruing rights in the Public Service and his service as Administrator will be counted for the purpose of his Commonwealth service.

For footnotes *see* page 74.

Commonwealth legislation passed during 1968—continued

Northern Territory (*Administration*) *Act* (No. 2) 1968 (No. 47) increased the number of members in the Legislative Council of the Northern Territory from eight to eleven.

Northern Territory Representation Act 1968 (No. 11) gave the Member for the Northern Territory of Australia full voting rights in the House of Representatives.

Northern Territory Supreme Court Act 1968 (No. 116) amended the *Northern Territory Supreme Court Act* 1961–1966 to provide that all jurisdiction of the Supreme Court of the Northern Territory extends to the Territory of Ashmore and Cartier Islands.

Officers' Rights Declaration Act 1968 (No. 6) amended the Schedule to the *Officers' Rights Declaration Act* 1928–1959 to entitle the Administrator of the Northern Territory to retain his rights of leave and superannuation if he is appointed from the Commonwealth Public Service to the position of Administrator (*see also* the *Northern Territory Administration Act* 1968).

Overseas Telecommunications Act 1968 (No. 31) amended the *Overseas Telecommunications Act* 1946–1966, introducing various administrative and financial changes in the activities of the Overseas Telecommunications Commission.

Overseas Telecommunications Act (No. 2) 1968 (No. 139) authorised the introduction of new international telecommunications arrangements between Commonwealth countries by the formation of a Commonwealth Telecommunications Council in London to replace the Commonwealth Telecommunications Board.

Papua and New Guinea Act 1968 (No. 25) amended the *Papua and New Guinea Act* 1949–1966 to give elected members further responsibilities in administration and policy making.

Papua and New Guinea Act (No. 2) 1968 (No. 157) made statutory provision for guarantees which the Commonwealth Government has given in relation to payments for superannuation and retirement benefits, and up-dated the Act with respect to appointments of overseas officers to the Territory Public Service.

Papua and New Guinea Loan (*International Bank*) *Act* 1968 (No. 71) guaranteed the borrowing of $US7m ($A6.2m) by the Administration of the Territory of Papua and New Guinea from the International Bank for Reconstruction and Development.

Parliamentary Allowances Act 1968 (No. 101) increased Commonwealth parliamentary allowances.

Parliamentary Retiring Allowances Act 1968 (No. 103) increased Commonwealth parliamentary retiring allowances.

Pay-roll Tax Assessment Act 1968 (No. 61).

Petroleum (*Submerged Lands*) *Act* 1968 (No. 1)‡.

Phosphate Fertilizers Bounty Act 1968 (No. 86) amended the *Phosphate Fertilizers Bounty Act* 1963–1966, providing for an increase in the bounty on phosphatic fertiliser manufactured and sold in Australia.

Post and Telegraph Act 1968 (No. 32) amended the *Post and Telegraph Act* 1901–1966, up-dating provisions relating to the carriage of mails by sea and air, and the damaging of Post Office property by road making equipment and the like.

Post and Telegraph Act (No. 2) 1968 (No. 33) established a Post Office Trust Account for the receipt of Post Office revenue, and to meet Post Office expenditure.

Post and Telegraph Rates Act 1968 (No. 68) adjusted postal charges and altered some postal tariffs.

Processed Milk Products Bounty Act 1968 (No. 113) amended section 4 of the *Processed Milk Products Bounty Act* 1962–1967, to permit the payment of this bounty on specified processed milk products that have been manufactured from products that already attracted the production bounty under another Act.

Privy Council (*Limitation of Appeals*) *Act* 1968 (No. 36) limited the matters in which special leave of appeal to Her Majesty in Council may be sought from the High Court, from other Federal Courts, and from the Supreme Courts of the Territories of the Commonwealth.

Public Service Act 1968 (No. 59) amended the *Public Service Act* 1922–1967, providing for reduction in the furlough qualifying period from eight years to four years.

Public Service Act (*No.* 2) 1968 (No. 114) amended the *Public Service Act* 1922–1967 as amended by the *Public Service Act* 1968, widening the scope for the granting of leave of absence without pay.

For footnotes *see* page 74.

Commonwealth legislation passed during 1968—continued

Queensland Grant (*Maraboon Dam*) *Act* 1968 (No. 35) granted financial assistance to the State of Queensland in connection with the construction of a dam on the Nogoa River near Emerald in that State.

Railway Agreement (*New South Wales*) *Act* 1968 (No. 43) provided for the contribution of $10m towards the cost of improving the existing railway from Parkes to Broken Hill.

Railway Agreement (*New South Wales and South Australia*) *Act* 1968 (No. 126) provided for the financing of the construction of a standard gauge railway from Broken Hill to Cockburn, 30 per cent of the cost of which is to be repaid by South Australia over fifty years.

Railway Agreement (*Queensland*) *Act* 1968 (No. 41) provided for additional financial assistance of $0.6m to be made available to Queensland for the Collinsville–Townsville–Mount Isa railway project.

Raw Cotton Bounty Act 1968 (No. 118) amended the *Raw Cotton Bounty Act* 1963–1966 to make the bounty payable purely on the basis of quality and quantity of production of raw cotton produced, whether it be spun in Australia or not.

Removal of Prisoners (*Australian Capital Territory*) *Act* 1968 (No. 82) authorised the removal of prisoners and certain other persons from the Australian Capital Territory to prisons in New South Wales.

Removal of Prisoners (*Territories*) *Act* 1968 (No. 9)‡.

Repatriation Act 1968 (No. 66) amended the *Repatriation Act* 1920–1967 to provide *inter alia* for increases in the rates of war and service pensions.

Repatriation (*Special Overseas Service*) *Act* 1968 (No. 78) amended the *Repatriation* (*Special Overseas Service*) *Act* 1962–1966 to provide for the payment of service and for the extension, in certain cases, of a period of special service to include a period of service in Australia.

Salaries Act 1968 (No. 120) increased salaries and allowances payable to permanent heads of Commonwealth Departments and second division officers.

Sales Tax Act (No. 1) 1968 (No. 88); *Sales Tax Act* (No. 2) 1968 (No. 89); *Sales Tax Act* (No. 3) 1968 (No. 90); *Sales Tax Act* (No. 4) 1968 (No. 91); *Sales Tax Act* (No. 5) 1968 (No. 92); *Sales Tax Act* (No. 6) 1968 (No. 93); *Sales Tax Act* (No. 7) 1968 (No. 94); *Sales Tax Act* (No. 8) 1968 (No. 95); *Sales Tax Act* (No. 9) 1968 (No. 96); *Sales Tax Assessment Act* (No. 5) 1968 (No. 109).

Science and Industry Research Act 1968 (No. 7).

Science and Industry Research Act (No. 2) 1968 (No. 52) amended the *Science and Industry Research Act* 1949–1966, as amended by the *Science and Industry Research Act* 1968, providing for funds for the Commonwealth Scientific and Industrial Research Organisation from the Consolidated Revenue Fund.

Seamen's Compensation Act 1968 (No. 124) increased the amounts of weekly payments of compensation payable to, and in respect of, seamen.

Seamen's War Pensions and Allowances Act 1968 (No. 67) amended the *Seamen's War Pensions Allowances Act* 1940–1967 to provide for an increase in the rates of certain pensions and allowances and to provide for an allowance to compensate for serious incapacity.

Service and Execution of Process Act 1968 (No. 147) amended the *Service and Execution of Process Act* 1901–1963 to allow the service of a writ of summons interstate as well as intrastate.

Social Services Act 1968 (No. 65) amended the *Social Services Act* 1947–1967, to increase the invalid pension, age pension for married couples, widow's pension, pensioner's wife's allowance, and the rehabilitation training allowance.

Spirits Act 1968 (No. 110).*

States Grants (*Aboriginal Advancement*) *Act* 1968 (No. 155); *States Grants Act* 1968 (No. 127); *States Grants* (*Beef Cattle Roads*) *Act* 1968 (No. 44); *States Grants* (*Coal Mining Industry Long Service Leave*) *Act* 1968 (No. 77); *States Grants* (*Deserted Wives*) *Act* 1968 (No. 48); *States Grants* (*Drought Assistance*) *Act* 1968 (No. 29); *States Grants* (*Drought Reimbursement*) *Act* 1968 (No. 30); *States Grants* (*Pre-school Teachers Colleges*) *Act* 1968 (No. 115); *States Grants* (*Science Laboratories*) *Act* 1968 (No. 12); *States Grants* (*Secondary Schools Libraries*) *Act* 1968 (No. 125); *States Grants* (*Special Assistance*) *Act* 1968 (No. 138); *States Grants* (*Technical Training*) *Act* 1968 (No. 53).

For footnotes *see* page **74**.

Commonwealth legislation passed during 1968—continued

Stevedoring Industry (Temporary Provisions) Act 1968 (No. 146) amended the *Stevedoring Industry (Temporary Provisions) Act* 1967 to correct certain anomalies.

Superannuation Act 1968 (No. 49) amended the *Superannuation Act* 1922–1967 to provide that members of the Superannuation Fund who become contributors to the Defence Forces Retirement Benefits Fund have their contributions to the Superannuation Fund deferred.

Superannuation Act (No. 2) 1968 (No. 57) amended the *Superannuation Act* 1922–1967 as amended by the *Superannuation Act* 1968 by removing the qualifying period for eligibility for retrenchment benefits provided by the Act.

Supply Act (No. 1) 1968–69 (No. 22); *Supply Act* (No. 2) 1968–69 (No. 23).

Tasmanian Agreement (Hydro-electric Power Development) Act 1968 (No. 42) provided $47m for hydro-electric power development in Tasmania.

United States Naval Communication Station (Civilian Employees) Act 1968 (No. 54) provided rights in respect of the injury, disease or death of certain civilian employees at the United States Naval Communication Station in Australia.

Universities (Financial Assistance) Act 1968 (No. 13).

Victoria Grant (River Murray Salinity) Act 1968 (No. 34).

War Service Homes Act 1968 (No. 99) amended the *War Service Homes Act* 1918–1966 to increase the minimum loan under the war service homes scheme from $7,000 to $8,000 and to incorporate minor amendments facilitating the administration of the Act.

Western Australia Agreement (Ord River Irrigation) Act 1968 (No. 50) provided $48.18m for the construction of a dam on the Ord River and associated works.

Wheat Export Charge Act 1968 (No. 98).

Wheat Industry Stabilisation Act 1968 (No. 97).

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* The purpose of these Acts is to amend the original Acts to the extent necessary in order to establish a Collectorate of Customs in the Northern Territory.

† The purpose of these Acts is to repeal Acts now superseded by the *Excise Act* 1968.

‡ These Acts are consequent on the recent abolition of the former Department of Territories.

§ The further purpose of these Acts is to amend the original Acts to provide that part of a State or Territory may be attached, for customs administration purposes, to another State or Territory.

|| These Acts provide for the introduction of new procedures designed to facilitate air travel.

¶ The purpose of these Acts is to overcome certain difficulties which have become apparent in the practice of the Acts.

** The purpose of these Acts is to provide for an additional levy on livestock slaughter to finance service and investigation activities.

CHAPTER 4

DEFENCE

Department of Defence

Functions of Department of Defence

The functions of the Department of Defence include: defence policy; joint Service matters and matters having an inter-departmental defence aspect; the financial requirements of defence policy and the allocation of the funds made available; the supply aspect of defence policy including the review of production programmes and capacity; important matters of policy or principle affecting the Defence Forces and their requirements, including the strength, organisation and disposition of the forces, higher appointments in the Services, their weapons and equipment, and defence research and development.

Organisation, higher defence machinery, and the control of the joint Service machinery

The joint Service and inter-departmental advisory machinery of the Department consist of various committees and joint staffs headed by the Defence Committee, the Chiefs of Staff Committee, the Defence Administration Committee, and the Joint War Production Committee.

The *Defence Committee* is a statutory body consisting of the Secretary, Department of Defence, who is Chairman; the Chairman of the Chiefs of Staff Committee; the Chiefs of Staff of the three Services; the Secretary, Prime Minister's Department; the Secretary, Department of the Cabinet Office; the Secretary, Department of External Affairs; and the Secretary to the Treasury. Its function is to advise the Minister for Defence on: the defence policy as a whole and the co-ordination of military, strategic, economic, financial, and external affairs aspects of defence policy; matters of policy or principle and important questions having a joint Service or an inter-departmental defence aspect; and such other matters having a defence aspect as are referred to the Committee by or on behalf of the Minister for Defence.

The *Chiefs of Staff Committee* meets regularly for the discussion of technical military matters on a joint service basis, and is responsible in peace for the preparation of military appreciations and plans. The functions of the *Defence Administration Committee* are the regular review of the progress of the Defence Programme, the co-ordination or integration of Service activities where appropriate in the interests of improved efficiency and economy, and the improvement of methods and organisation. The function of the *Joint War Production Committee* is, briefly, to examine the Services' requirements for war *matériel* and to recommend whether industrial capacity is adequate to meet them.

In addition, a *Defence Business Board* is constituted to advise on business matters of common interest to the three Services, or important subjects on which the collective advice of the Board is desired from the business aspect, with a view to promoting efficiency and economy in the execution of the Defence Programme. The Board comprises businessmen who serve in a part-time honorary capacity and consists of an independent chairman and deputy chairman and the business advisers of the three Service Departments.

The first stage of the reorganisation of the Defence Department machinery is now in operation. Under these arrangements a series of staffs have been set up under a Director, Joint Staff, and comprising service personnel drawn from the Service Departments together with civilian officers of the Defence and External Affairs Departments as appropriate. These staffs will examine long-term defence policy and planning, particularly in the strategic field, equipment requirements, joint warfare, military operations, logistics, and communications. When necessary the Director, Joint Staff, will convene working parties from the Services and other authorities for special tasks.

The Defence Science organisation in the Department is also being developed, and this will contribute to defence planning and policy formulation in the wider sense, as well as co-ordinating the research and development work necessary to support the Services generally. Planning is well advanced for the establishment of a Joint Service College to provide tertiary-level education for officer cadets, and also of an Australian Service Staff College to train selected Service officers for joint service staff and command appointments. In addition, a study of new joint intelligence arrangements is almost completed and progress has been made in integrating activities in the medical and dental fields.

Basis of current defence policy

The primary aims of Australia's defence policy are to ensure the security of the Australian mainland and island Territories and to protect Australian national interests. In pursuance of these aims, Australia continues to play an active part, commensurate with national interests and resources, in regional security alliances in south-east Asia and the Pacific—SEATO, ANZUS and Commonwealth defence arrangements—with the objective of assisting our allies in meeting the continuing communist pressures, and of developing free and independent states in a secure environment.

Australia has a particular interest in the peace and stability of Malaysia and Singapore, and will maintain close co-operation with its partners in this area. In the light of the British withdrawal and changing circumstances in the south-east Asian area generally the Australian Government has been making a fundamental re-examination of defence policies and the part which Australian forces would play in the future in collective defence and combined training arrangements. The Government has announced that it has been decided to maintain forces in Malaysia and Singapore until the end of 1971.

Personnel strengths

Of the Army strength some 16,000 are national servicemen. The selective national service scheme is in its fourth year of operation and continues to be essential for the maintenance of Army strength.

PERSONNEL STRENGTHS OF DEFENCE FORCES, JUNE 1959 TO 1969

NAVY

Strength at June—	*Permanent forces*	*Citizen forces*	*Emergency reserves*	*Total*
1959	10,699	7,850	..	18,549
1960	10,598	7,816	..	18,414
1961	10,722	7,770	..	18,492
1962	11,103	6,424	..	17,527
1963	11,663	5,433	..	17,096
1964	12,569	5,202	..	17,771
1965	13,503	3,762	443	17,708
1966	14,714	3,797	686	19,197
1967	15,893	3,931	793	20,617
1968	16,454	4,047	904	21,405
Estimated strength at June 1969	17,510	4,070	1,075	22,655

ARMY

Strength at June—	*Permanent forces*				
	Australian Regular Army	*Pacific Islands Regiment*	*Citizen forces*	*Emergency reserves*	*Total*
1959	21,371	602	54,683	..	76,656
1960	20,772	661	37,921	..	59,354
1961	19,878	581	26,958	..	47,417
1962	20,985	638	30,041	..	51,664
1963	21,944	695	27,341	..	49,980
1964	22,681	812	27,505	..	50,998
1965	25,314	1,415	28,146	288	55,163
1966	32,702	1,732	32,046	662	67,142
1967	41,464	2,246	34,670	889	79,269
1968	42,944	2,406	35,762	1,031	82,143
Estimated strength at June 1969	43,900	2,800	38,000	1,100	85,800

PERSONNEL STRENGTHS OF DEFENCE FORCES, JUNE 1959 TO 1969—*continued*

AIR FORCE

Strength at June—	*Permanent forces*	*Citizen forces*	*Emergency reserves*	*Total*
1959	15,455	864	..	16,319
1960	15,743	764	..	16,507
1961	15,592	671	..	16,263
1962	15,815	765	..	16,580
1963	15,840	788	..	16,628
1964	16,564	926	..	17,490
1965	17,720	724	26	18,470
1966	19,358	865	170	20,393
1967	20,130	1,059	303	21,492
1968	21,564	907	397	22,868
Estimated strength at June 1969	22,950	919	580	24,449

Equipment

Expenditure on equipment of a capital nature in 1967–68 was $335.7m, including $114.8m under credit arrangements with the United States Government. It is expected that $350m will be spent in 1968–69 including $90m under the credit arrangement with the United States. This increase arises from deliveries of items ordered under the recent Defence Programme.

During 1967–68 a significant number of major items of equipment were received in Australia. These included ships (1 destroyer tender, 1 Oberon submarine, and 8 patrol boats); aircraft (12 ASW Tracker, 10 Skyhawk fighter bombers, 9 Orion, 24 Mirage, 19 Macchi, 4 Pilatus Porter, 30 helicopters, and 4 VIP); and a large quantity of military vehicles and equipment. Further major items of equipment expected to be received in 1968–69 include ships (12 patrol boats, 1 Oberon submarine); aircraft (12 Mirage, 36 Macchi, 24 F111C, 8 HS748 Navigation Trainers, 10 Pilatus Porter, and 25 helicopters), and military equipment including personnel carriers, land rovers, trucks, and ammunition. Two destroyer escorts are under construction in Australian shipyards and one Oberon submarine in British shipyards.

Research and development

The laboratories of the Department of Supply together with the Services' own technical establishments, have continued to work on projects and investigations in support of Service needs. A new agreement with the United Kingdom has been negotiated for the conduct of the Woomera Range and its associated technical facilities, and collaborative programmes in space tracking and other selected topics have been arranged with the U.S.A.

Defence expenditure

DEFENCE EXPENDITURE, BY DEPARTMENT OR SERVICE, 1963–64 TO 1968–69 ($'000)

	Defence(a)	*Navy*	*Army*	*Air*	*Supply*	*Other*	*Total*
Actual expenditure—							
1963–64	3,829	111,103	158,067	178,351	58,586	10,988	520,924
1964–65	9,683	136,008	199,962	185,930	66,744	10,656	608,983
1965–66	14,040	170,622	261,752	218,109	71,364	11,969	747,856
1966–67—							
Total	18,081	202,607	352,837	281,011	80,312	15,240	950,088
less United States credits .	..	19,533	14,829	53,837	2,354	..	90,553
Payments from appropriations	18,081	183,074	338,008	227,174	77,958	15,240	859,535
1967–68—							
Total	17,492	223,492	381,019	378,615	90,038	18,877	1,109,533
less United States credits .	..	32,805	16,432	81,705	1,195	..	132,137
Payments from appropriations	17,492	190,687	364,587	296,910	88,843	18,877	977,396
Estimated expenditure—							
1968–69—							
Total	21,645	233,722	401,093	437,254	93,504	29,942	1,217,160
less United States credits .	..	18,572	15,761	86,997	1,022	..	122,352
Payments from appropriations	21,645	215,150	385,332	350,257	92,482	29,942	1,094,808

(*a*) Includes defence aid for Malaysia and Singapore, and recruiting campaign from 1964–65.

Logistic arrangement with United States Government

A logistic arrangement has been agreed with the United States Government in respect of Australian equipment purchases during the programme period up to 30 June 1968. This arrangement is in effect a 'package deal' covering all the items required instead of negotiating each separate purchase as it arises, and by this method Australia has obtained more advantageous financial terms together with assurances of better delivery dates to meet our requirements. Under this arrangement, instead of paying for the equipment roughly in line with deliveries, the Government is enabled to spread payments over an extended period.

Reserve of Citizen Forces

Under amendments made to defence legislation in 1964 the Citizen and Reserve Forces may be called out by proclamation for continuous full-time service in a 'Time of Defence Emergency'. The particular circumstances giving rise to the proclamation of a time of defence emergency could be varied, but would occur in a situation where the Regular Forces needed the full-time support of the Citizen and Reserve Forces in hostilities short of general war.

The legislation also provided for the establishment of volunteer Emergency Reserves for the three Services. These Reserves provide a ready means of supplementing and reinforcing operational units and may be called out for continuous full-time service when the Governor-General considers it desirable to do so.

Australian forces serving overseas

Australia has participated with the United Kingdom and New Zealand in the Commonwealth Strategic Reserve since it was first established in Malaya in 1955, and has continued to station forces in the Reserve following the formation of Malaysia and Singapore. The Australian component of the Strategic Reserve has comprised:

Navy—two destroyers or frigates with an annual visit by an aircraft carrier and escorts;

Army—-one infantry battalion group and a light anti-aircraft battery;

Air Force—two fighter squadrons and supporting units.

In response to an invitation of the Government of South Vietnam Australia has provided forces since 1962 to assist in the defence of that country. Details of the progressive increase in these forces between 1962 and 1967 are outlined in Year Book No. 53. The force level was further increased during the first half of 1968 from 6,300 to some 8,000, comprising:

Navy—a guided missile destroyer, a clearance diving team, and pilots, ground crew, and supporting personnel.

Army—a task force of three infantry battalions, a Centurion tank squadron, artillery field regiment and their combat support units; a logistic support force; and a 99-man Army Training Team.

Air Force—a squadron of eight Canberra bombers, a squadron of sixteen Iroquois helicopters, and a squadron of six Caribou transport aircraft.

After consultation with the Governments concerned, the squadron of R.A.A.F. Sabre fighter aircraft previously deployed in Thailand (*see* Year Book No. 54) was regrouped with the R.A.A.F. at Butterworth in August 1968. This regrouping will not affect the R.A.A.F's. ability to deploy if required in pursuance of SEATO obligations.

Defence support aid

In support of Australia's strategic policy of contributing to the common defence of south-east Asia the Government provides substantial financial aid to our Asian allies. This aid is given in the forms of civil aid and technical assistance, as well as direct defence assistance to support the armed forces of these countries and to increase their defence capability.

Under the SEATO Aid programme assistance to the extent of $2,400,000 will be provided for South Vietnam, Thailand, Pakistan, and the Philippines during 1968–69. This will include material assistance, the training of service and civilian personnel both in their home countries and in Australia, and, in the case of South Vietnam, special aid in the medical and developmental fields and civic action by the Australian Force Vietnam.

Malaysia is also being further assisted to strengthen its defence capability by the extension of the aid programme commenced in 1964. The Australian Government, having provided some $25 million for Malaysia and Singapore to the end of 1967, announced the provision of a further $20 million to the end of 1970. The aid to Malaysia includes ammunition, military vehicles, weapons, small craft, engineer equipment, and general stores. Malaysian servicemen will continue to be trained in Australia and in the Malaysian area, and the seconding of Australian servicemen to the Malaysian armed forces will also be continued. Defence aid to Singapore comprises engineer equipment, field ambulances, vehicle maintenance equipment, and 2½ ton four-wheel-drive trucks. Army training courses will also be provided in Australia for Singapore services personnel.

Naval defence

Prior to 1901, naval defence systems were organised under the State Governments. Information regarding these systems is given in Year Book No. 2, page 1084. An outline of the development of Australian naval policy is given in Year Books No. 3, page 1060, and No. 12, page 1012. An account appears in Year Book No. 15, pages 921–3, of the building of the Australian Navy, its costs, the compact with the Imperial Government, and other details. The growth and the activities of the Royal Australian Navy during the 1939–45 War are shown in Year Book No. 36, pages 1023–7.

Under the provisions of the Commonwealth of Australia Constitution Act the Minister of State for the Navy administers the Department of the Navy. Under the *Naval Defence Act* 1910–1966 the Royal Australian Navy is administered by the Naval Board. The Naval Board consists of the Minister as Chairman, four Naval Members, and the Secretary to the Department of the Navy.

Strong links with the Royal Navy are maintained by a constant exchange of officers for extended tours of duty and by a full exchange of information and ideas. A liaison staff is maintained by the Royal Australian Navy in London and by the Royal Navy in Australia. Advanced training and staff courses in the United Kingdom are provided by the Royal Navy for Royal Australian Navy officers. A liaison staff is also maintained by the Royal Australian Navy in Washington, and a comprehensive exchange of information is provided by this link. Staff courses in the United States are also attended by officers of the Royal Australian Navy.

Ships of the Royal Australian Navy

In commission, March 1969: *Melbourne*—aircraft carrier; *Sydney*—transport; *Supply*—oiler; *Stalwart*—destroyer tender; *Perth*, *Hobart* and *Brisbane*—guided missile destroyers; *Vampire*, *Vendetta*, *Dutchess* and *Anzac*—destroyers; *Yarra*, *Parramatta*, *Stuart*, *Derwent*, *Queenborough*—destroyer escorts; *Hawk*, *Gull*—coastal minesweepers; *Curlew*—coastal minehunter; *Moresby*, *Paluma*—surveying ships; *Diamantina*, *Kimbla*—oceanographic research ships; *Oxley*, *Otway*, *Ovens*—submarines; *Attack*, *Aitape*, *Acute*, *Adroit*, *Advance*, *Archer*, *Ardent*, *Arrow*, *Assail*, *Aware* *Bandolier*, *Barbette*, *Barricade*, *Bayonet*, *Bombard*, *Buccaneer*, *Ladava*, *Lae*, *Madang*, *Samarai*—patrol boats; *Banks*, *Bass*—auxiliaries.

In reserve, March 1969: *Tobruk*—destroyer; *Quiberon*, *Quickmatch*—destroyer escorts; *Gascoyne*—oceanographic research ship; *Culgoa*—barrack ship; *Teal*, *Ibis*, *Snipe*—coastal minesweepers.

On service overseas. During the year ended March 1969 the following ships served in south-east Asian waters as units of the Commonwealth Strategic Reserve with headquarters in Singapore: *Vendetta*, *Parramatta*, *Yarra*, *Dutchess*, *Derwent*. The following ships served in support of the allied forces in South Vietnam: *Hobart*, *Perth*, *Sydney*.

The ships *Anzac*, *Moresby* and *Diamantina* also made overseas visits.

Fleet Air Arm

The Fleet Air Arm of the Royal Australian Navy maintains three front line squadrons for embarkation in the operational carrier H.M.A.S. *Melbourne*. These squadrons currently consist of Skyhawk A4-G fighter/ground attack aircraft, Tracker S2-E anti-submarine aircraft, and Wessex MK. 31B submarine helicopters. Four training and support squadrons are based at the Naval Air Station H.M.A.S. *Albatross* at Nowra, New South Wales. Other aircraft operated by the Navy are the Scout helicopter (survey ships), Iroquois helicopter (training and search and rescue), Dakota, Vampire trainer, and Sea Venom (target towing).

Ship construction and repairs

There are two naval dockyards, one at Garden Island, New South Wales, and one at Williamstown, Victoria. Also, the dockyard at Cockatoo Island, which is operated by the Cockatoo Docks and Engineering Company Pty Ltd by agreement with the Commonwealth, carries out considerable naval work. All three dockyards carry out ship refitting for the Navy.

Included in the present ship construction plan is the building of two destroyer escorts, one each at Cockatoo Island and Williamstown Dockyards. One submarine of the Oberon class is under construction in the United Kingdom. Twenty 100-foot patrol vessels were built by Evans Deakin and Co. Pty Ltd, Brisbane, Queensland, and Walkers Ltd, Maryborough, Queensland (ten by each contractor). H.M.A.S. *Melbourne* underwent an extended refit during 1968 at Garden Island Dockyard. The Daring class destroyers *Vendetta and Vampire* are to have an extended refit, commencing in 1970. The anti-submarine guided weapon Ikara, which has been designed and developed in Australia, is being fitted into the guided missile destroyers and escorts.

Personnel, entry, training, women's services, reserves

Personnel. The authorised establishment of the Royal Australian Navy in relation to personnel borne for full-time duty for 1968–69 is 17,512. At 30 November 1968 the actual strength of personnel borne for full-time duty was 1,809 officers and 14,949 sailors, which includes 169 officers and sailors of the Citizen Naval Forces and 21 officers and sailors of the Royal Australian Navy Emergency Reserve.

Naval college. The Royal Australian Naval College, H.M.A.S. *Creswell,* is at Jervis Bay. The College was established to provide trained officers for the R.A.N. Junior entry to the College is at the age of fifteen to seventeen years, and senior entry at a maximum age of twenty years. Subsequent training as midshipmen and sub-lieutenants is in ships of the fleet, at universities or technical colleges, and at Royal Navy training establishments in the United Kingdom. In November 1968 there were eighty-six cadet midshipmen under training.

Direct entry into Navy. To meet increasing requirements for officers, direct entries are accepted into the Royal Australian Navy. Short service commissions of seven years are granted on completion of training as seamen or aircrew officers to suitable applicants who have completed their secondary schooling and who are over seventeen years of age and under twenty-three years of age for seamen applicants, and under twenty-four years for aircrew applicants. Other direct entries may be approved outside these age limits from persons with appropriate qualifications and experience.

Opportunities exist for university undergraduates studying medicine, dentistry, mechanical engineering, electrical engineering, or aeronautical engineering to enter the R.A.N., and on successful completion of their studies to commence short or full-time service in the Navy. Fully qualified doctors, dentists, mechanical or electrical engineers, and instructors may also enter the R.A.N. directly if they are of the appropriate age.

Training establishments. H.M.A.S. *Cerberus* at Westernport, Victoria, is the main training establishment for adult sailors in the permanent naval forces, while several advanced training schools are established in New South Wales. The period of initial engagement for sailors varies from six years for tradesmen entry to nine or twelve years, and on completion sailors may re-engage for shorter periods up to the age of fifty.

H.M.A.S. *Nirimba* at Quakers Hill, New South Wales, is the naval school for apprentices. It provides secondary education, as well as technical training in trades, to boys aged fifteen to seventeen and a half years. The school was established in 1956 to meet the R.A.N.'s increasing demand for highly skilled tradesmen. In November 1968 there were 622 naval artificer apprentices under training. H.M.A.S. *Leeuwin* at Fremantle, Western Australia, is the junior recruit training establishment. Entrants must be aged between fifteen and a half and sixteen and a half years. Training lasts one year and instruction is mainly academic, the remaining time being devoted to basic naval and disciplinary training. On completion of the course sailors are posted for a period of sea training, after which they proceed to technical and specialist courses. In November 1968 there were 602 junior recruits undergoing training.

Women's Services. The present Women's Royal Australian Naval Service was inaugurated in January 1951. The numbers serving in shore establishments in November 1968 were 24 officers and 628 Wrans. The Royal Australian Naval Nursing Service was reconstituted in November 1964, and its strength in November 1968 was 23 officers.

Emergency Reserve. In November 1964 approval was given to form the Royal Australian Naval Emergency Reserve to provide a readily available source of trained manpower which may be called on for continuous full-time service. The authorised establishment of this force is 2,000 officers and sailors. At 30 November 1968 the strength of the reserve available for mobilisation was 63 officers and 937 sailors, which excludes 3 officers and 18 sailors serving full-time. Members are required to complete thirteen days' training annually and are paid an annual bounty.

Citizen Naval Forces. The Citizen Naval Forces consist of the R.A.N. Emergency List, Royal Australian Fleet Reserve, Royal Australian Naval Reserve, Royal Australian Naval Reserve (Seagoing), Royal Australian Naval Volunteer Reserve, and Women's Royal Australian Naval Service Reserve. The authorised establishment of the combined forces is 10,000. At 30 November 1968 there were 1,270 officers and 2,697 sailors in the Citizen Naval Forces. These figures exclude 107 officers and 62 sailors serving full-time. The R.A.N.R. is the training reserve of the Citizen Naval Forces. Members carry out weekly training and thirteen days' continuous training annually; sailors engage for periods of three years. Other reserves do not normally carry out part-time training, but members may volunteer for periods of annual training and for periods of full-time service with the R.A.N. A Women's Royal Australian Naval Service Reserve consisting of ex-permanent naval forces W.R.A.N.S. officers and W.R.A.N.S. was authorised in June 1968 and enlistments commenced in mid-November 1968.

Military defence

A detailed historical account of the Australian defence forces prior to federation appears in Year Book No. 2, pages 1075–81. *See also* Year Book No. 12, page 999.

Commonwealth systems

Under the terms of the Commonwealth of Australia Constitution Act the Commonwealth took over control of defence matters in March 1901. The growth of the Commonwealth Military Forces may be considered to have taken place in a number of phases. For particulars of the phases which cover the period from the welding together of the military forces of the States into one homogeneous Army in 1902 up to the re-establishment of the Military Board and the organisation of Commands after the 1939–45 War *see* Year Book No. 46 and earlier issues.

National Service Training was introduced in 1951 and suspended in 1959–60. In November 1964 the Government announced that National Service Training was to be re-introduced from June 1965. The scheme provides for a period of two years full-time duty in the Regular Army followed by three years in the reserve. National Service registrants who are members of the Citizen Military Forces or who join prior to the ballot may elect to serve in the C.M.F. for a total of five or six years, depending on length of previous service, as an alternative to full-time continuous National Service Training. Special C.M.F. units have been formed to provide for those persons who wish to serve in the C.M.F., but who are unable to do so in normal units, because of remote location, etc.

Organisation

Army Headquarters is responsible for the policy and control of the Australian Military Forces. The Military Board consists of the Minister for the Army, President; the Chief of the General Staff; the Adjutant-General; the Quartermaster-General; the Master-General of the Ordnance; the Deputy Chief of the General Staff; the Citizen Military Forces Member; and the Secretary, Department of the Army. After the 1939–45 War, Command Headquarters were established to implement Army Headquarters policy and to command and administer those units placed under their authority. Command Headquarters are established in the capital cities of Australia and Papua-New Guinea. The geographic extent of Commands is as follows.

Northern Command—the State of Queensland.

Eastern Command—the State of New South Wales, less those parts included in Southern and Central Commands.

Southern Command—the State of Victoria and part of southern New South Wales.

Central Command—the State of South Australia, plus a portion of south-western New South Wales.

Western Command—the State of Western Australia.

Tasmania Command—the State of Tasmania.

Northern Territory Command—the Northern Territory.

Papua-New Guinea Command—the Territory of Papua-New Guinea.

The Army is divided into the Field Force, Forces in Papua-New Guinea, and the Australian Support Area, with both Regular and Citizen Military Forces elements in each. The basic formation of the Field Force is the division, which consists of nine infantry battalions with supporting arms and services units. Within the division three task force headquarters can command varying combinations of divisional units. The substantial parts of the combat elements of one Regular and two C.M.F. divisions have been raised, together with logistic support units. The Regular element of the Forces in Papua-New Guinea consists of two battalions of the Pacific Islands Regiment with a number of supporting units. An infantry battalion forms the major C.M.F. element. The Australian Support Area provides the training, administrative, and command structure on the mainland.

At 30 December 1968, units of the Australian Regular Army were deployed overseas as follows. In Malaysia a battalion group was serving as part of the British Commonwealth Far East Strategic Reserve, while an anti-aircraft battery was serving at the invitation of the Malaysian Government. In Vietnam a Task Force of three battalions with supporting units, including aircraft support provided by the Royal Australian Air Force, was serving at the invitation of the Government of that country; an armoured squadron joined the Task Force early in 1968.

Personnel, training, women's services, cadets

Personnel. The effective strength at 29 November 1968 was: Australian Regular Army 45,770, (including 2,422 Pacific Islanders, 397 Citizen Military Forces on full-time duty, and 726 Women's Services); Citizen Military Forces, 34,927.

Staff College. Until 1938 the training of staff officers was carried out in the various Military Districts throughout Australia, except in cases where officers were selected from time to time to attend courses abroad. In 1938 an Australian Command and Staff School, located in the original Officers' Mess at Victoria Barracks, Sydney, was established. Between 1939 and 1945 the training of staff officers was carried out under varying conditions by different schools in accordance with the changing needs of the war.

Early in 1946 the Staff School (Australia) was established at Seymour, Victoria, and redesignated the Staff College in conformity with other Commonwealth training establishments for training officers for command and staff appointments. The College was later moved to Queenscliff, Victoria, where it is at present situated. The course is held annually and is of twelve months' duration. The normal intake is seventy students, and on successfully completing the course an officer is awarded the symbol 'psc'. The course is designed to train selected officers for appointments in all branches of the staff in peace and war and to prepare them to assume, after experience, command and higher staff appointments.

Included in the 1969 course will be students from the United Kingdom, Canada, New Zealand, India, United States of America, Thailand, Malaysia, the Philippines, Pakistan, Indonesia, Fiji and Ceylon. Vacancies on each course are reserved also for officers who may be nominated by the Royal Australian Navy, the Royal Australian Air Force, and the Commonwealth Public Service.

In order to ensure common standards in tactical doctrine and staff and command training throughout the Commonwealth of Nations liaison is maintained with other Staff Colleges, and to this end there is also a reciprocal exchange of instructors between the United Kingdom, the United States of America, and Australia. An instructor is also provided by New Zealand.

Royal Military College. The Royal Military College was established in 1911 at Duntroon in the Australian Capital Territory for the purpose of providing trained officers for the Army. The conditions of entry are laid down in the Royal Military College Regulations. The length of the normal course is four years. While at the College, Staff Cadets are wholly maintained, and, in addition, receive payment increasing with each year of the course. The course of instruction is organised into military and civil departments, and instruction is given by officers of the Army and academic staff. On graduation cadets are appointed lieutenants in the Australian Regular Army. The College also trains New Zealand cadets for commissions in the New Zealand Permanent Forces. In 1967 one Thai cadet commenced training at the College.

Officer Cadet School. The Officer Cadet School was established in 1951 at Portsea, Victoria, for the purpose of speeding up the production of junior regimental officers for the Australian Regular Army. Serving members of the Australian Regular Army, the Citizen Military Forces and civilians between the ages of eighteen and a half and twenty-two and a half years are eligible to apply for entrance. A special entry provides for candidates up to twenty-four and a half years. The course lasts for forty-four weeks, and on graduation cadets are appointed second-lieutenants in the Australian Regular Army. Graduates normally proceed to further training at the Army School of the Arm and Service to which they have been allotted before being posted to regimental duties. The Officer Cadet School also trains officers on occasions for Malaysia, New Zealand, Thailand, the Philippines, and Brunei.

Officer Training Unit. An Officer Training Unit has been established at Scheyville, New South Wales, which is responsible for the training of National Service officers.

Women's Royal Australian Army Corps School. The W.R.A.A.C. School, established in 1952 at Mildura, Victoria, moved to Mosman, New South Wales, in 1958. It has three wings, one whose primary task is the training of officer cadets for the W.R.A.A.C., one for the training of non-commissioned officers at all levels and for other special courses, and one which is a basic training wing. The officer cadets are selected from eligible applicants, who may be serving members between nineteen and a half and thirty-two years of age, or civilians between twenty-one and thirty years of age. The course is of six months' duration and on graduation cadets are appointed lieutenants in the Women's Royal Australian Army Corps.

Army Apprentices' School. The Army Apprentices' School was opened in 1948 at Balcombe, Victoria, with the aim of training youths as skilled tradesmen for the Australian Regular Army and to form a background for an Army career with prospects of promotion. The course is open to boys between the ages of fifteen and seventeen years and provides training in a number of highly skilled trades. A three-year course of intensive theoretical and practical work at the Apprentices' School is followed by one year in an appropriate Army workshop or technical unit. At the end of their third year boys are given their Army trade test and also take the Victorian Apprenticeship Commission's final grade public examinations, which ensures that they will be accepted as qualified tradesmen in civil life when they eventually leave the Army. In addition to trade training the Apprentices' School provides general educational facilities up to the School Leaving Standard.

Other schools. Army schools have been established for the major Arms and Services for the purpose of training officers and other ranks in the up-to-date techniques of their own Arm or Service, to qualify them for promotion requirements, and to produce trained instructors. Courses at Army schools are conducted for members of both the Australian Army and the Citizen Military Forces.

The following Army schools have been established: Jungle Training Centre, Armoured Centre, School of Artillery, School of Military Engineering, Transportation Centre, School of Military Survey, School of Signals, Infantry Centre, Army Intelligence Centre, Royal Australian Army Service Corps Centre, Royal Australian Army Medical Corps School of Army Health, Royal Australian Army Ordnance Corps Centre, Royal Australian Electrical and Mechanical Engineers' Training Centre, School of Music, Air Support Unit (Army Component), and Air Movement Training and Development Unit (Army Component).

Women's Services. In July 1950 approval was given for the enlistment of women into the Australian Regular Army on a limited scale. Enlistment commenced into the Royal Australian Army Nursing Service in November 1950 and into the Australian Women's Army Corps early in 1951. In February 1951 the Royal Australian Army Nursing Service became a Corps and was designated the Royal Australian Army Nursing Corps (R.A.A.N.C.). During June 1951 the Australian Women's Army Corps was redesignated the Women's Royal Australian Army Corps (W.R.A.A.C.). The Women's Services in the Australian Regular Army now comprise two Corps only, the Royal Australian Army Nursing Corps and the Women's Royal Australian Army Corps.

Women's Services are incorporated in the Citizen Military Forces, and one company of the Women's Royal Australian Army Corps is located in each Command excluding Northern Territory Command and Papua-New Guinea Command. Companies of the Royal Australian Nursing Corps are located in each Command excluding Northern Territory Command and Papua-New Guinea Command.

Australian Cadet Corps. The Australian Cadet Corps is a voluntary organisation. It serves as a training ground to provide, to some extent, the future officers and non-commissioned officers of the Australian Military Forces, and, as such, occupies a foremost position in the scheme of national defence. The Australian Cadet Corps, does not, however, form part of the Australian Military Forces. School Cadet units are raised at educational establishments throughout the Commonwealth and Papua and New Guinea, except in the Northern Territory. The minimum age for enrolment is the year in which the applicant reaches the age of fourteen years, and cadets, who, in the large majority of schools receive a free issue of A.M.F. pattern uniform, may remain in the Cadet Corps until they cease to be pupils of the educational establishments concerned. A few units retain their own pattern school uniform and are not issued with A.M.F. pattern uniforms. Provision is made for the appointment of officers, cadet under-officers, warrant and non-commissioned officers on an authorised establishment scale from within school units. School Cadet units may be, and in many cases are, affiliated with Citizen Military Force units. The establishment of the Corps is 46,000 all ranks, and at 15 October 1968 comprised 349 School Cadet units with a posted strength of 41,285, all ranks.

Air defence

A statement regarding the preliminary steps taken in connection with the development of air defence appears in Year Book No. 18, page 610, and one on the expansion and development and type of operations of the Royal Australian Air Force during the 1939–45 War in Year Book No. 36, page 1027. Details of the current defence expansion as it affects the R.A.A.F. were outlined by the Prime Minister in his speech in the House of Representatives on 8 November 1965.

Higher organisation

The Air Board is responsible to the Minister for Air for the control, organisation, and administration of the Royal Australian Air Force and is constituted as follows: Chief of the Air Staff, Air Member for Personnel, Air Member for Supply and Equipment, Air Member for Technical Services, and the Secretary, Department of Air.

The Air Board administers and controls R.A.A.F. units in Australia and its Territories through two commands, Operational Command and Support Command. The guiding principles of the command organisation within Australia are to decentralise day-to-day operating activities as far as possible and to streamline the force and make it as efficient as possible. The operational units overseas, working within the broad directives issued by the Air Board, comprise the R.A.A.F. component of the British Commonwealth Strategic Reserve located at Butterworth in Malaysia, and the R.A.A.F. component of the Australian task force in South Vietnam.

The members of the Air Board and their staffs are located at the Department of Air in Canberra. An R.A.A.F. representative is located in London, and air attachés are located in Djakarta, Saigon, Paris, and Washington. *Operational Command* is responsible for the command of operational units and the conduct of their operations within Australia and its territories. *Support Command* is responsible for the recruitment and training of personnel, and the supply and maintenance of service equipment.

Organisation of units

Bases. Each command is established with the units necessary to carry out its allotted function. There is no fixed rule in relation to the number and types of units within each command, as this depends upon the nature of its present and future responsibilities. Where possible, units having similar functions or requiring similar facilities are located together, and the geographical locations are known as bases.

Formations—comprising a headquarters unit to control the activities of a number of units at one location; each formation has a base squadron which provides common services to all units at the location.

Flying squadrons—strike reconnaissance, air defence, ground attack, medium and short range transport, helicopter, and maritime reconnaissance squadrons which undertake the operational flying and, in conjunction with operational conversion units, the operational flying training commitments of the R.A.A.F.

Operational conversion units—specialising in operational conversion training of aircrew for the strike reconnaissance, air defence, and ground attack squadrons.

Aircraft depots—specialising in major overhaul, etc., of aircraft and equipment.

Stores depots—centrally located depots to which stores and equipment ordered by the R.A.A.F. are delivered for distribution to units.

Airfield construction squadron—specialising in airfield construction tasks in support of the R.A.A.F. operational component within Australia and the Territories.

Telecommunications units—responsible for the communications services of the R.A.A.F.

R.A.A.F. Hospitals—hospitals in Australia and at Butterworth providing medical services for the R.A.A.F.

Flying and ground schools and units—schools and units specialising in the aircrew and ground staff training required by the R.A.A.F.

R.A.A.F. Diploma Squadron and R.A.A.F. Academy—training units, to diploma and university degree level respectively for officer cadet entrants to the R.A.A.F.

R.A.A.F. Staff College—trains specially selected R.A.A.F. officers for higher staff and command posts.

Aircraft

The R.A.A.F.'s strike reconnaissance force is equipped with Canberras, and the air defence and ground attack squadrons are equipped with the Mirage 111-O and Avon Sabre. Transport aircraft currently in use are Hercules C130A and E, Caribou, Dakota, Mystere 20, HS748, BAC111, and Viscount. The two helicopter squadrons operate the Iroquois and the two maritime squadrons operate Neptune SP2H and Orion P3-B aircraft. During 1969 the strike reconnaissance force will be re-equipped with the F111 C. Aircraft used for training are the Winjeel, Macchi, HS748, Sabre, and Mirage 111-O.

Personnel, reserve, women's services

At 1 December 1968, the authorised Permanent Air Force establishment was 24,102 and the Citizen Air Force, 1,080; the enlisted strength was Permanent Air Force 21,848 and Citizen Air Force 878, while the strength of the General Reserve was 8,029. The Permanent Air Force figures include the Women's Royal Australian Air Force, which has an establishment of 1,038 and strength of 952, and the R.A.A.F. Nursing Service with an establishment of 102 and strength of 96.

Department of Supply

For information relating to the creation of the Department of Supply and its development up to 1959 *see* Year Book No. 51, page 1204, and earlier issues. On 18 December 1959 the Department assumed responsibility for the operation and management of space tracking stations in Australia on behalf of the United States National Aeronautics and Space Administration. On 29 March 1962 Australia became a foundation member of the European Launcher Development Organisation, and the Department accepted responsibility for the test firing of the launching rocket for that Organisation's experimental satellite, using the facilities of the Woomera Rocket Range.

On 1 May 1968 the Department took over the administration of the Antarctic Division from the Department of External Affairs.

Functions of Department

The functions of the Department of Supply include the following.

Defence research and development, including the operation of the Joint United Kingdom–Australia Weapons Research Project, and Australian research and development.

Operation and management of factories, workshops, and undertakings concerned in the production of munitions (including aircraft), clothing, canvas-ware, and other defence goods.

Manufacture, acquisition, provision, and supply of munitions (including aircraft) and miscellaneous goods and services required by the defence forces.

Arrangement of contracts for the supply of goods and the performance of services.

Operation and management of space tracking stations in Australia on behalf of the United States National Aeronautics and Space Administration.

Test firing of the launching rocket for the European Launcher Development Organisation's experimental satellite, using the facilities of the Woomera Rocket Range.

Acquisition, maintenance, and disposal of strategic materials.

Planning and establishment of manufacturing facilities for the production of munitions and other defence goods.

Investigation and development of Australian sources of supply in connection with defence.

Sale or disposal of surplus Commonwealth property other than land or buildings.

Provision of Commonwealth transport facilities outside the Australian Capital Territory and the Northern Territory.

Provision and control of stores required for or in connection with matters administered by the Department of Supply, and general storage for other Departments as required.

Arrangements for ascertaining costs and the control and limitation of profits in connection with the production of munitions and other defence goods.

Organise expeditions and establish and maintain stations in the Antarctic for the purposes of exploration and conducting scientific studies.

The Minister for Supply administers the *Supply and Development Act* 1939–1966, except in so far as it concerns the building (*see also* the chapter Transport and Communication), repair, and maintenance of merchant ships and the building, extension, alteration, repair, and maintenance of shipyards, drydocking, and repair facilities for merchant ships.

The Minister for Supply also administers the *Antarctic Treaty Act* 1960, the *Australian Antarctic Territory Acceptance Act* 1933, the *Australian Antarctic Territory Act* 1954–1963, *Heard Island and McDonald Islands Act* 1953–1963.

Research and Development

The Research and Development Division is responsible for research and scientific development in relation to war *matériel*, including the operation of the Joint United Kingdom–Australia Weapons Research Project and support of space research programmes for ELDO and NASA. The headquarters of the Division is situated in Canberra, and the following establishments are included in the Division: (*a*) Weapons Research Establishment, Salisbury, South Australia; (*b*) Defence Standards Laboratories, Maribyrnong, Victoria; Woodville North, South Australia; and Alexandria, New South Wales; (*c*) Aeronautical Research Laboratories, Fishermen's Bend, Victoria.

Weapons Research Establishment

The establishment has four main sections, namely the Trials Wing, the Space Physics Wing, the Weapons Research and Development Wing, and the Engineering Wing. The Trials Wing is concerned with the operation, development, and instrumentation of the Woomera Range, and the planning, execution, and assessment of trials. The Space Physics Wing conducts research and development on behalf of the Australian Services and in support of the United Kingdom–Australia Joint Project.

The Weapons Research and Development Wing is concerned primarily with Australian initiated defence research and development. The Engineering Wing provides engineering design and development and support facilities for other Weapons Research Establishment wings and research establishments and undertakes tasks for the Australian Services.

United States space projects

Agreements have been signed by the Australian and United States Governments for a co-operative programme for the establishment and operation in Australia of space vehicle tracking stations. The agencies for the Australian and American Governments are the Department of Supply and the National Aeronautics and Space Administration (NASA) respectively.

As part of the world-wide network supporting NASA's space programme the stations are designed to track spacecraft in their orbits around the earth or on their journey into space, to receive telemetered data from the vehicle, and to issue radio commands controlling the vehicle's manoeuvres. The Department of Supply is responsible for managing, staffing, and operating the stations on behalf of NASA. The stations which are now in operation are at:

Island Lagoon near Woomera (deep space probes and optical tracking of scientific satellites);
Carnarvon in Western Australia (manned space flights and scientific satellites);
Tidbinbilla in the A.C.T. (deep space probes and manned space flights);
Orroral Valley in the A.C.T. (scientific satellites);
Honeysuckle Creek in the A.C.T. (manned space flights, particularly the 'man on the moon' Apollo project);
Cooby Creek near Toowoomba, Queensland (applications technology satellites).

An extensive communications system links the tracking stations with the control centres in the United States.

At all six stations the responsibility is vested in a station director who is a senior officer of the Department of Supply.

Under the Australian Government's policy of using the resources of private industry wherever possible, contracts for operation and maintenance services at the stations have been let as follows. Space Track Pty Ltd (Tidbinbilla and Island Lagoon), Amalgamated Wireless (A'asia) Ltd (Carnarvon and Cooby Creek), E.M.I. Electronics (Australia) Pty Ltd (Orroral Valley), and Standard Telephones and Cables Pty Ltd (Honeysuckle Creek).

NASA space projects requiring Australian participation are as follows.

Manned space flights

Project Apollo—landing of men on moon and their return to earth.

Scientific and applications satellites

Large multiple experiment scientific satellites (Orbiting Geophysical Observatories; Orbiting Astronomical Observatories, etc.). Operations satellites for meteorology (Tiros).
Applications technology satellites for communications, navigation, radio propagation, etc. (ATS).

Deep space probes

Mariner—probes to Mars, Venus, etc.
Pioneer—interplanetary investigations.

Defence Standards Laboratories

This establishment provides a scientific service to the Defence Services, Department of Supply factories and other authorities generally within the fields of chemistry, physics, metallurgy and engineering and to a limited extent, in the fields of biochemistry and physiology. It also undertakes background research appropriate to its responsibilities and of significance to the defence requirements of Australia.

Aeronautical Research Laboratories

In the aeronautical field this establishment undertakes research and development work on specific defence projects, acts as consultant and conducts investigations for the Services, Government Departments or industries engaged on defence work. Background research related to the execution of its responsibilities and of significance to the defence requirements of Australia is also undertaken.

Production of munitions

The Department is responsible for the production of a wide range of munitions required by the Armed Services. Production is carried out substantially in Government factories, although some orders, mainly for components, are placed with private industry.

The following Government factories are currently in operation: Ammunition—Footscray, Victoria; Explosives and Filling—Albion and Maribyrnong, Victoria; Mulwala and St Mary's, New South Wales; Ordnance—Maribyrnong, Bendigo, and Port Melbourne, Victoria; Small Arms—Lithgow, New South Wales; Clothing—South Melbourne and Brunswick, Victoria.

The Ammunition Factory produces the complete round of small arms ammunition and also components for larger calibre gun ammunition, including empty cartridge cases, electronic and mechanical fuses, and primers. The Explosives Factories produce the various types of explosive compositions and propellants required for gun ammunition, rockets, and guided missiles. The Filling Factory at St Marys fills and assembles into complete rounds of ammunition (other than small arms ammunition) the empty components and materials supplied by the other munitions factories and by private industry.

The Ordnance Factories at Maribyrnong and Bendigo are equipped to produce heavy ordnance equipment, such as naval guns and gun mountings; large turbine gears; steel shell bodies; empty rocket motors for guided missiles; trailers and tank transporters; and other items requiring heavy engineering capacity. As well as work for the Services, the Bendigo Factory produces components for marine diesel engines for Australian shipping and large heavy engineering items for the coal, cement, and steel industries.

The Port Melbourne Factory builds and services large marine diesel engines for the Australian shipbuilding industry. Major forgings and fabrications for these engines are produced at the Ordnance Factories at Maribyrnong and Bendigo. The Small Arms Factory is equipped to produce the rifles and other small arms required by the Services. Current production is the 7.62-mm automatic rifle, for which orders have also been received from overseas, and the 9-mm carbine which serves as the infantry light machine gun. The Clothing Factories make uniforms and clothing for the three Services, the Postmaster-General's Department and some other Commonwealth authorities.

Production of aircraft and guided weapons

Production both in Government factories and in industry of military types of aircraft and aero engines and of other aircraft components required by the Royal Australian Air Force is administered by the Department of Supply. Planning of capacity and the negotiation of contractual arrangements concerning aircraft modification, repair and overhaul, and for the supply of spare parts and airborne equipment for the R.A.A.F., the R.A.N., and the Army are also functions of the Department.

The following factories are operated by the Department: The Government Aircraft Factory at Fishermen's Bend and the Final Assembly Workshops and Test Airfield at Avalon, Victoria, and the Airframe Repair Workshops at Parafield and Northfield, South Australia. During 1968 the French Mirage supersonic fighter aircraft production programme for the R.A.A.F. was completed. The current aircraft production programme comprises the Jindivik radio-controlled target aircraft, which has been or is being supplied to Britain, Sweden, and the United States, as well as to the Weapons Research Establishment and the Royal Australian Navy. Apart from the Government Aircraft Factory, the Commonwealth Aircraft Corporation Pty Ltd is the only major aircraft manufacturer in Victoria. The Corporation is the prime contractor for the Australian production for the R.A.A.F. of the Italian Macchi jet trainer and for the production of the British Viper engine that powers this aircraft.

Other major activities carried out in the Government factories or by various private contractors are the manufacture of airframe and engine spare parts; the overhaul, repair, and modification of military aircraft and engines currently in service with the R.A.A.F., R.A.N., and Army; and the reconditioning and servicing of aircraft instruments and other ancillary equipment.

The production of the Ikara anti-submarine missile is continuing at the Government Aircraft Factory at Fishermen's Bend. Production of the complete Ikara system, covering broadly the missile, motor, propellants, guidance equipment, launcher, and magazine handling equipment, is a combined effort by departmental establishments and industry, directed and co-ordinated by the Department.

At St Mary's, New South Wales, a guided weapons repair facility has been established to repair and maintain the Tartar surface-to-air missile supplied by the United States for Australia's new missile destroyers. Later, the facility will be expanded to cater for other Service missiles.

Electronics supply

The Department is responsible for the technical aspects of production and procurement from Australian industry of telecommunications and electronic equipment for the Australian Services, for Commonwealth authorities such as Directorate of Civil Defence and for external aid programmes administered by the Department of External Affairs.

Some of the more important projects handled for the Services include a ground to air high-frequency communications system for Air, high-frequency transmitters for Army, high-frequency transmitters and antennae for long-range Navy shore to ship communications, portable shelters for communications equipment for Air and medium-speed data transmission equipment for Army, Navy and Air.

A large contract has been arranged for the domestic development of micro-electronic devices. Other contracts have also been arranged to establish the reliability of Australian made electronic equipment and components.

Contract Board

Under the *Supply and Development Act* 1939–1966 the Contract Board is the authority responsible for the arranging of contracts for the performance of services and the purchase of supplies for the Naval, Military, and Air Forces of the Commonwealth, as well as for the Department of Supply. The Board is also responsible for the sale or disposal of all surplus or unserviceable Commonwealth goods approved for disposal. By arrangement, the Board also arranges purchases on behalf of other Commonwealth departments and authorities which desire to use its facilities.

The Contract Board comprises representatives of the Departments of the Navy, Army, Air, and Supply. In each State there is a District Contract Board similarly constituted, with an attached contracting staff. The District Boards have been authorised to exercise the functions of the Contract Board within specified financial limits. The Contract Board has no attached contracting staff of its own and all contracts are arranged by the offices of the District Contract Boards provided that where the value of a contract exceeds the delegated authority of the District Board concerned it is required to be submitted to the Contract Board for approval. The table following shows, in respect of the Contract Board organisation, the purchases and realisations from disposals for the years 1966–67 and 1967–68.

CONTRACT BOARD ORGANISATION: PURCHASES AND REALISATIONS FROM DISPOSALS, 1966-67 AND 1967-68

($'000)

	Purchases		*Realisations from disposals*	
District Contract Board	*1966–67*	*1967–68*	*1966–67*	*1967–68*
New South Wales	29,651	29,512	2,674	2,681
Victoria	184,784	168,385	3,153	2,517
Queensland	5,644	5,765	862	820
South Australia	10,258	11,142	1,154	1,566
Western Australia	1,418	1,193	495	466
Tasmania	235	280	153	147
Total	**231,990**	**216,277**	**8,491**	**8,197**

Defence supply planning

The central planning authority of the Department is the Production Planning Branch, whose principal functions are:

- to study manufacturing capacity available for the Services' requirements in peace and war;
- to plan for and assist in the development of additional production capacity;
- to provide and administer reserve stocks of materials and reserve pools of plant, equipment and other requirements needed for rapid expansion in the event of war;
- to prepare submissions on defence production preparedness to the higher defence machinery;

to plan the organisation of industrial resources for defence production in war;
to receive and allocate to appropriate departmental divisions all orders and procurement demands placed on the Department;
to inform Service and other customers on all matters of price, delivery, and expenditure phasing of requirements allocated for satisfaction by the production divisions;
to monitor achievement against departmental master delivery programmes;
to provide advisory services in the field of materials supply and utilisation of Government factories and contractors engaged in the production of munitions requirements;
to administer the national stockpile of strategic materials, equipment, tooling and components;
to administer overseas aid programmes allocated to the Department;
to develop commercial outlets for departmental products, and plans for the full use of production capacity, exploitation of inventions and protection of patents;
to undertake commercial sales;
to administer the Board of Management for Production; and
to provide administrative services to the Industry Advisory Committees.

A series of Industry Advisory Committees has been established to advise the Minister and the Department on the ability of industry to meet the Services' *matériel* requirements for mobilisation in war. The Committees are: Aircraft and Guided Weapons; Chemical; Electrical; Electronics and Telecommunications; Fibres, Textiles, Clothing, and Cordage; Leather and Footwear; Machine Tools and Gauges; Materials; Mechanical Engineering; and Rubber. Members of the Committees include industrialists of wide experience and the highest ability in their chosen fields.

Stores and Transport Branch

This Branch functions as the central storage and transport authority for most Commonwealth Departments. It is the authority for the arrangement of furniture removals at departmental expense in all States, but not in the Northern Territory. It has agents in Darwin. It also operates a shipping and customs section and the England–Australia bulk air freight scheme for Commonwealth Departments.

On 30 June 1968 the Branch had under its control land, buildings, and works, vehicles, plant, and equipment valued at $27,240,110; 4,499 motor vehicles and 3,200,000 sq ft of storage space as well as storage facilities for large quantities of chemicals, bulk liquids, and explosives.

Finance Branch

The total expenditure on Department of Supply activities in 1967–68 was $163,872,000, comprising $88,843,000 (net) from Parliamentary appropriations and $75,029,000 from Trust Fund accounts. The latter included expenditure of $16,536,000 for storage and transport and $52,108,000 in Government Munitions and Aircraft Factories.

In addition, transactions under the United States–Australian logistics arrangement in 1967–68 amounted to $1,195,000, comprising $496,000 relating to Parliamentary appropriations and $699,000 relating to Trust Fund accounts.

CHAPTER 5

REPATRIATION

The Repatriation Commission, established under the *Repatriation Act* 1920–1968, consists of three full-time members. It is responsible for the administration of the Repatriation Act and associated legislation, all matters of policy, and the general administration and overall supervision of the Repatriation Department. The central office is in Melbourne and there is a branch office, under the control of a Deputy Commissioner, in each State.

The principal functions of the Department are: the payment of war and service pensions to eligible ex-servicemen and ex-servicewomen and their dependants; the provision of medical treatment for ex-servicemen and ex-servicewomen for injuries and illnesses caused or aggravated by their war service; the provision of medical treatment in certain circumstances for ex-servicemen and ex-servicewomen who are suffering from injuries and illnesses not caused or aggravated by war service; and the provision of medical treatment for widows and dependants of deceased ex-servicemen whose deaths are due to war service.

Benefits are provided in respect of service, not only in the 1914–18 and 1939–45 Wars, but also in the Korea and Malaya operations and with the British Commonwealth Far East Strategic Reserve and the Special Overseas Forces.

Other functions of the Repatriation Department are outlined in a later section of this chapter.

For information on war service land settlement *see* Chapter 19, Public Finance; for statistics relating to war service homes *see* Chapters 9, Housing and Building and 19, Public Finance.

War pensions

The first provision for the payment of war pensions to ex-servicemen and their dependants was made by the Commonwealth Parliament in the *War Pensions Act* 1914. This Act was repealed in 1920 by the *Australian Soldiers' Repatriation Act* 1920 (amended from 31 December 1950 to the Repatriation Act). Amendments to the Act in 1943 considerably widened the eligibility provisions, to the benefit mainly of members of the Citizen Military Forces who had not served outside Australia. The main features relating to war pensions under repatriation legislation are set out in the following paragraphs.

Eligibility for pensions

Claims for eligibility for war pensions are determined in the first instance by Repatriation Boards, of which there is one in each State of the Commonwealth. Members of women's services are eligible for pensions and other benefits, as prescribed in the Act, on the same basis as male members of the forces.

A member of the forces who served (*a*) outside Australia, (*b*) in the Territories of Australia, such as Papua and New Guinea, or (*c*) within Australia in circumstances which can be regarded as combat against the enemy is covered for war pension purposes in respect of incapacity or death which may result from any occurrence that happened during the period from the date of his enlistment to the date of the termination of his service in respect of that enlistment.

In other cases where a member served only in Australia, incapacity or death to be pensionable must have arisen out of, or have been attributable to service.

There is a third ground applicable to all members except those with less than six months camp service or active service. This provides that, where a condition existed at enlistment, a pension may accrue if it is considered that the condition was aggravated by service.

Korea and Malaya operations. The commencement of hostilities in Korea and Malaya in 1950 made necessary the insertion in the Repatriation Act of a new division, under the terms of which the pension provisions of the Act were extended to Australian ex-servicemen and ex-servicewomen who served or were allotted for duty in prescribed operational areas. A new Regulation was also made, in 1951, to make such service personnel eligible for almost all the benefits available under the existing Regulations applicable to members of the forces.

Repatriation (*Far East Strategic Reserve*) *Act* 1956–1966. Provision was made under this Act for Australian forces who served in south-east Asia as part of the British Commonwealth Strategic Reserve. This Act, together with Regulations made under it, gave members with Malayan service the right to many benefits available under the Repatriation Act.

Repatriation (Special Overseas Service) Act 1962–1968. This legislation provides repatriation benefits for serving members of the defence forces, the circumstances of whose service expose them to risks above the normal conditions of peace-time service. Regulations made under the Act prescribe special areas within which service qualifies for Repatriation benefits. Service in the following special areas during certain periods carries entitlement to Repatriation benefits: the Malayan Peninsula and Singapore and fifty miles to seaward but excluding the territories of Indonesia; South Vietnam, and an area 100 miles to seaward of both North and South Vietnam; an area in Borneo comprising Sarawak, Brunei and Sabah, and an area fifty miles to seaward but excluding any territories of the Philippines.

Pulmonary tuberculosis. An exception is made in the case of war pension for pulmonary tuberculosis for which there are special provisions in certain circumstances.

Rates

The main classes of war pensions are the special rate, the intermediate rate, the general rate, and the war widow's pension. These are not subject to a means test except where stated for certain classes of dependants.

The *special rate* of war pension is payable where, because of war service, an ex-serviceman is totally and permanently incapable of earning other than a negligible percentage of a living wage or has been blinded. An amount equivalent to the special rate pension may also be granted to an ex-serviceman pensioned for pulmonary tuberculosis and temporarily unfit for employment; to an ex-serviceman who is temporarily incapacitated by war-caused disability for a period of not less than three months to such a degree as to prevent him from earning more than a negligible percentage of a living wage; or to a double amputee. The weekly rate is $33.50 plus $4.05 wife's allowance and $1.38 for each child under sixteen years.

The *intermediate rate* of war pension is payable where an ex-serviceman, because of the severity of incapacity from his accepted war disabilities, can work only part-time or intermittently and consequently is unable to earn a living wage. An amount equivalent to the intermediate rate may be granted to ex-servicemen pensioned for pulmonary tuberculosis and unfit for full time work. The weekly rate is $24.25 plus $4.05 wife's allowance and $1.38 for each child under sixteen years.

The *general rate* of war pension is the rate payable to those who suffer war-caused disabilities but are not thereby prevented from working, although their earning capacity may be reduced. The actual pension payable is assessed in accordance with the degree of incapacity suffered. The maximum (100 per cent) rate is $12 a week. A wife and children under sixteen years also receive pensions at rates according to the assessed degree of incapacity of the ex-serviceman, the maximum being $4.05 for a wife and $1.38 for each child.

The *war widow's pension* is paid to widows of ex-servicemen who died as a result of war service and to their children under the age of sixteen years. A war widow's pension may also be paid to the widow of an ex-serviceman who was receiving, at the time of his death, or is subsequently adjudged to have been entitled to receive, the special rate of war pension or the rate payable to double amputees. The weekly rates are: widow, $14; first child, $5.40; second and each subsequent child, $4.25.

Other dependants of an ex-serviceman who is suffering from a disability due to war service may be granted pensions under certain circumstances. Such pensions are subject to a means test and are assessed in accordance with the degree of the ex-serviceman's incapacity. Except in the case of a widowed mother of an unmarried ex-serviceman, other dependants are required to prove dependence on the ex-serviceman.

Allowances

The following allowances are provided in addition to pension.

Domestic allowance (*$7 a week*). This is paid, in addition to pension, to a widow of an ex-serviceman whose death is due to war service if she is fifty years of age, or is permanently unemployable, or has a dependent child under the age of sixteen years, or a dependent child over sixteen years being educated or trained and not in receipt of an adequate living wage.

Attendant's allowance (*maximum rate* $12 *a week*). This allowance is paid, in addition to war pension, to certain classes of seriously disabled ex-servicemen, for example, the war blinded, the paralysed, and certain double amputees.

Clothing allowance. To compensate for exceptional wear and tear or damage to clothing, a clothing allowance at rates ranging from 43c to 85c may be paid to an ex-serviceman who is blinded, or who has lost an arm or a leg as a result of his war service, or who is required to wear a surgical aid or appliance. It may also be paid where an ex-serviceman's clothing is damaged as a result of a war-caused disability or of the medical treatment of that disability. An amount of up to $22.10 in any one year is payable for damage to clothing under certain conditions.

Sustenance allowance. This allowance is paid where an ex-serviceman is prevented from following his normal occupation through treatment of a war-caused disability or while undergoing medical investigation. The rate payable, where out-patient treatment is being received for a period of up to four weeks, or in-patient medical investigation is being carried out, is the same as the general (100 per cent) rate pension, less the amount of any war pension being paid.

Where an ex-serviceman is receiving in-patient treatment for a war-caused disability or is undergoing periods of essential convalescence immediately following discharge from hospital, or is prevented from following his usual occupation because of the necessity of out-patient treatment or combined periods of out-patient and in-patient treatment for a war-caused disability for a continuous period in excess of four weeks, a higher rate to bring the sustenance allowance up to the equivalent of the special rate is paid.

The wife, and any children under sixteen years of age, of an ex-serviceman who is receiving a sustenance allowance, are paid an amount which, when added to any war pension being paid, is equal to the full general rate pension for a wife and such children.

Recreation transport allowance. This allowance, which is payable at rates not exceeding $20 per month, provides transport for recreation purposes and may be paid to an ex-serviceman who, as a result of war service, suffers certain amputations of the arms or legs or is seriously disabled to the extent that his powers of locomotion are negligible.

Other allowances and general assistance. These include a special compensation allowance for the severely incapacitated, an allowance for amputees, re-establishment loans and allowances, funeral benefits, vocational training allowances for education and training of children, fares and allowances for loss of remunerative time in connection with medical or pension purposes, and motor vehicle allowances for seriously disabled ex-servicemen.

Appeals tribunals

The principal Act was amended as from 1 June 1929 to create tribunals to hear appeals in respect of war pensions. War Pensions Entitlement Appeal Tribunals are empowered to hear and decide any appeal by or on behalf of ex-servicemen or their dependants against decisions of a Repatriation Board or the Repatriation Commission that the incapacity or death of an ex-serviceman did not arise out of war service. Assessment Appeal Tribunals were created to hear and decide any appeal against a current assessment or a 'Nil' assessment of war pension made by a Repatriation Board or the Repatriation Commission in respect of the incapacity of an ex-serviceman which had been accepted as due to service. Provision was made by subsequent legislation to enable the tribunals to hear appeals by certain members whose applications for a service pension had been refused on the grounds that they were not permanently unemployable or suffering from pulmonary tuberculosis.

Summary of war pensions

The following tables provide a summary of war pensions (excluding miscellaneous war pensions) for the 1914–18 War, the 1939–45 War (including war pensions payable under the *Interim Forces Benefits Act* 1947–1966 and the *Native Members of the Forces Act* 1957–1966), the Korea and Malaya operations, the Far East Strategic Reserve, and the Special Overseas Service. Statistics relating to miscellaneous war pensions are shown later in this section.

WAR PENSIONS: SUMMARY, AUSTRALIA, 1967–68

		1914–18 War	*1939–45 War(a)*	*Korea and Malaya operations*	*Far East Strategic Reserve*	*Special Overseas Service(b)*	*Total*
New claims granted	No.	976	16,732	722	250	1,287	19,967
Restorations	No.	50	273	9	5	6	343
Claims rejected(*c*)	No.	920	5,113	273	96	518	6,920
Pensions cancelled (gross)	No.	304	23,930	222	25	58	24,539
Deaths of pensioners	No.	5,524	5,378	40	5	3	10,950
Number of pensions in force at 30 June 1968		93,446	507,507	11,247	1,506	2,270	615,976
Annual pension liability at 30 June 1968	$'000	53,282	109,854	1,269	145	298	164,848
Amount paid in pensions during the year 1967–68	$'000	n.a.	n.a.	n.a.	n.a.	n.a.	164,121

(*a*) Includes interim forces and native members of the forces. (*b*) *See* page 92—*Repatriation (Special Overseas Service) Act* 1962–1966. (*c*) Number of ex-servicemen who had their claims for all their disabilities rejected.

WAR PENSIONS: SUMMARY, AUSTRALIA, 1963–64 TO 1967–68

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
New claims granted . .	32,417	27,879	22,750	21,121	19,967
Restorations . . .	992	803	571	526	343
Total additions . .	*33,409*	*28,682*	*23,321*	*21,647*	*20,310*
Pensions cancelled (gross) .	25,285	25,948	26,450	25,732	24,539
Deaths of pensioners . .	9,441	10,342	10,308	10,898	10,950
Total reductions . .	*34,726*	*36,290*	*36,758*	*36,630*	*35,489*

Classes of war pensions

The following tables provide an analysis of the total number of new claims granted, pensions in force, and members on special rates for 1967–68.

WAR PENSIONS: NEW CLAIMS GRANTED, AUSTRALIA, 1967-68

Class	*1914–18 War*	*1939–45 War(a)*	*Korea and Malaya operations*	*Far East Strategic Reserve*	*Special Overseas Service*	*Total*
Ex-servicemen	441	5,094	151	59	566	6,311
Wives and widows of ex-servicemen . . .	500	5,401	158	57	299	6,415
Children	18	6,061	406	130	408	7,023
Other dependants . . .	17	176	7	4	14	218
Total	**976**	**16,732**	**722**	**250**	**1,287**	**19,967**

(*a*) Includes interim forces and native members of the forces.

WAR PENSIONS IN FORCE: AUSTRALIA, 30 JUNE 1968

Class	*1914–18 War*	*1939–45 War(a)*	*Korea and Malaya operations*	*Far East Strategic Reserve*	*Special Overseas Service*	*Total*
Ex-servicemen	33,617	184,442	3,033	432	955	222,479
Wives	34,817	158,402	2,380	332	482	196,413
Children	410	130,381	5,434	673	661	137,559
War widows . . .	23,942	22,336	127	18	54	46.477
Children of deceased ex-servicemen . . .	63	5,412	149	42	92	5,758
Orphans	27	155	3	1	. .	186
Parents	343	5,920	116	7	26	6,412
Others	227	459	5	1	. .	692
Total	**93,446**	**507,507**	**11,247**	**1,506**	**2,270**	**615,976**

(*a*) Includes interim forces and native members of the forces.

WAR PENSIONS: MEMBERS ON SPECIAL RATES OR EQUIVALENT, AUSTRALIA 30 JUNE 1968

Class	*1914–18 War*	*1939–45 War(a)*	*Korea and Malaya operations*	*Far East Strategic Reserve*	*Special Overseas Service*	*Total*
Totally and permanently incapacitated ex-servicemen	9,578	11,644	53	..	3	21,278
Blinded ex-servicemen . .	181	235	1	..	1	418
Tuberculous ex-servicemen .	288	186	5	1	..	480
Tuberculous ex-servicemen (intermediate rate) . .	71	181	4	..	..	256
Temporarily totally incapacitated ex-servicemen . .	267	1,580	17	5	5	1,874
Ex-servicemen suffering other disabilities . . .	42	50	2	..	3	97
Total	**10,427**	**13,876**	**82**	**6**	**12**	**24,403**

(*a*) Includes interim forces and native members of the forces.

Number of war pensions and annual liability, States, etc.

The following table shows the number of pensions in force and annual liability for each war, field of operations, or service at 30 June 1968, according to place of payment. (The amount paid is shown on page 98 of this chapter.)

WAR PENSIONS: NUMBER OF PENSIONS AND ANNUAL LIABILITY STATES, ETC., 30 JUNE 1968

	Number of war pensions in force at 30 June 1968				
Place of payment	*Incapacitated ex-servicemen*	*Dependants of incapacitated ex-servicemen*	*Dependants of deceased ex-servicemen*	*Total*	*Annual pension liability(a) ($'000)*
		1914–18 WAR			
New South Wales(*b*) . .	10,911	11,288	8,379	30,578	17,927
Victoria	10,824	11,168	8,074	30,066	17,457
Queensland	4,637	4,735	2,675	12,047	7,002
South Australia(*c*) . . .	2,672	2,958	1,958	7,588	4,139
Western Australia . . .	2,579	3,147	1,587	7,313	3,375
Tasmania	1,396	1,421	1,006	3,823	2,411
Abroad	598	818	615	2,031	971
Total	**33,617**	**35,535**	**24,294**	**93,446**	**53,282**
		1939–45 WAR(*d*)			
New South Wales(*b*) . .	65,829	98,977	12,827	177,633	39,770
Victoria	49,560	78,933	8,771	137,264	29,035
Queensland	27,769	45,805	5,042	78,616	18,186
South Australia(*c*) . . .	17,761	28,351	3,107	49,219	9,653
Western Australia . . .	15,935	24,047	2,666	42,648	8,476
Tasmania	7,050	12,511	1,048	20,609	4,260
Abroad	538	696	284	1,518	474
Total	**184,442**	**289,320**	**33,745**	**507,507**	**109,854**

(*a*) Includes domestic allowance payable to widows. (*b*) Includes Australian Capital Territory. (*c*) Includes Northern Territory. (*d*) Includes interim forces and native members of the forces.

WAR PENSIONS: NUMBER OF PENSIONS AND ANNUAL LIABILITY STATES, ETC., 30 JUNE 1968—*continued*

Place of payment	*Number of war pensions in force at 30 June 1968*				*Annual pension liability(a)* ($'000)
	Incapacitated ex-servicemen	*Dependants of incapacitated ex-servicemen*	*Dependants of deceased ex-servicemen*	*Total*	
KOREA AND MALAYA OPERATIONS					
New South Wales(*b*)	1,199	2,927	167	4,293	493
Victoria	685	1,667	47	2,399	253
Queensland	532	1,490	86	2,108	258
South Australia(*c*)	214	601	19	834	86
Western Australia	243	700	36	979	102
Tasmania	108	349	18	475	50
Abroad	52	83	24	159	27
Total	**3,033**	**7,817**	**397**	**11,247**	**1,269**
FAR EAST STRATEGIC RESERVE					
New South Wales(*b*)	192	484	34	710	64
Victoria	67	140	19	226	26
Queensland	112	250	9	371	38
South Australia(*c*)	15	40	1	56	3
Western Australia	32	56	2	90	7
Tasmania	12	30	1	43	4
Abroad	2	6	2	10	3
Total	**432**	**1,006**	**68**	**1,506**	**145**
SPECIAL OVERSEAS SERVICE					
New South Wales(*b*)	396	482	77	955	125
Victoria	187	199	28	414	55
Queensland	198	319	47	564	74
South Australia(*c*)	68	74	9	151	17
Western Australia	60	58	9	127	19
Tasmania	44	13	..	57	8
Abroad	2	..	..	2	..
Total	**955**	**1,145**	**170**	**2,270**	**298**
TOTAL					
New South Wales(*b*)	78,527	114,158	21,484	214,169	58,379
Victoria	61,323	92,107	16,939	170,369	46,826
Queensland	33,248	52,599	7,859	93,706	25,558
South Australia(*c*)	20,730	32,024	5,094	57,848	13,898
Western Australia	18,849	28,008	4,300	51,157	11,979
Tasmania	8,610	14,324	2,073	25,007	6,733
Abroad	1,192	1,603	925	3,720	1,475
Grand total	**222,479**	**334,823**	**58,674**	**615,976**	**164,848**

(*a*) Includes domestic allowance payable to widows. (*b*) Includes Australian Capital Territory. (*c*) Includes Northern Territory.

Summary of war pensions, 1963-64 to 1967-68

The following table shows, for each war, field of operations, or service, and in total, the number of pensions granted, claims rejected, pensions in force, and the annual liability for pensions in each of the years ended 30 June 1964 to 1968.

WAR PENSIONS: SUMMARY, AUSTRALIA, 1963-64 TO 1967-68

			Number of war pensions in force at 30 June—				
Year	*Pensions granted*	*Claims rejected(a)*	*Incapacitated ex-servicemen*	*Dependants of incapacitated ex-servicemen*	*Dependants of deceased ex-servicemen*	*Total*	*Annual pension liability at 30 June (b) ($'000)*
			1914–18 WAR				
1963–64 . .	2,050	1,678	44,401	43,521	23,846	111,768	47,145
1964–65 . .	1,631	1,481	41,820	41,353	24,191	107,364	47,730
1965–66 . .	1,455	1,402	39,219	39,511	24,311	103,041	54,818
1966–67 . .	1,184	1,110	36,429	37,499	24,342	98,270	55,307
1967–68 . .	976	920	33,617	35,535	24,294	93,446	53,282
			1939–45 WAR(c)				
1963–64 . .	29,301	6,113	175,377	341,464	30,816	547,657	85,363
1964–65 . .	25,173	5,525	178,558	331,398	31,865	541,821	92,050
1965–66 . .	20,156	5,620	180,976	318,210	32,418	531,604	100,837
1966–67 . .	18,150	5,409	182,830	304,038	33,009	519,877	106,615
1967–68 . .	16,732	5,113	184,442	289,320	33,745	507,507	109,854
			KOREA AND MALAYA OPERATIONS				
1963–64 . .	862	271	2,554	6,175	322	9,051	945
1964–65 . .	858	231	2,687	6,673	340	9,700	1,031
1965–66 . .	801	277	2,807	7,140	370	10,317	1,116
1966–67 . .	687	233	2,905	7,486	390	10,781	1,195
1967–68 . .	722	273	3,033	7,817	397	11,247	1,269
			FAR EAST STRATEGIC RESERVE				
1963–64 . .	196	58	223	396	39	658	62
1964–65 . .	208	49	275	536	39	850	76
1965–66 . .	170	87	314	646	52	1,012	99
1966–67 . .	284	98	378	835	58	1,271	126
1967–68 . .	250	96	432	1,006	68	1,506	145
			SPECIAL OVERSEAS SERVICE				
1963–64 . .	8	. .	1	5	2	8	1
1964–65 . .	9	. .	3	8	6	17	3
1965–66 . .	168	17	61	76	44	181	34
1966–67 . .	816	152	370	507	98	975	145
1967–68 . .	1,287	518	955	1,145	170	2,270	298
			TOTAL				
1963–64 . .	32,417	8,120	222,556	391,561	55,025	669,142	133,516
1964–65 . .	27,879	7,286	223,343	379,968	56,441	659,752	140,889
1965–66 . .	22,750	7,403	223,377	365,583	57,195	646,155	156,904
1966–67 . .	21,121	7,002	222,912	350,365	57,897	631,174	163,388
1967–68 . .	19,967	6,920	222,479	334,823	58,674	615,976	164,848

(a) The number of claimants who had the claims for all their disabilities rejected. (b) Includes domestic allowance payable to widows. (c) Includes interim forces and native members of the forces.

The following table shows, for the years 1963–64 to 1967–68, the amounts paid in pensions and the places where they were paid.

WAR PENSIONS: AMOUNT PAID(*a*), STATES, ETC., 1963-64 TO 1967-68
($'000)

Place of payment	*1963–64 (b)*	*1964–65*	*1965–66 (b)*	*1966–67*	*1967–68*
New South Wales(*c*)	53,108	52,809	58,851	55,884	57,424
Victoria	45,526	45,064	49,526	46,882	47,146
Queensland	23,040	23,295	25,928	24,992	25,525
South Australia(*d*)	13,500	13,209	14,633	13,613	13,807
Western Australia	11,547	11,430	12,617	11,869	11,914
Tasmania	6,152	6,210	6,914	6,650	6,786
Abroad	1,656	1,466	1,677	1,509	1,519
Total	**154,530**	**153,483**	**170,146**	**161,399**	**164,121**

(*a*) Includes domestic allowances paid to widows. (*b*) Includes five 12-weekly payments. (*c*) Includes Australian Capital Territory. (*d*) Includes Northern Territory.

Miscellaneous war pensions

The Commission is also responsible for the payment of pensions and allowances to beneficiaries under the *Seamen's War Pensions and Allowances Act* 1940–1967 and Cabinet decisions granting eligibility to persons who were attached to the armed forces during war-time.

The following table shows the number and class of pensions and the annual liability at 30 June 1968, and the table thereafter shows the amounts paid during the years 1963–64 to 1967–68 and the place of payment.

MISCELLANEOUS WAR PENSIONS: NUMBER OF PENSIONS AND ANNUAL LIABILITY, AUSTRALIA, 30 JUNE 1968

Class	*Number of pensions in force at 30 June 1968*				*Annual pension liability ($'000)*
	Members (a)	*Dependants of members*	*Dependants of deceased members*	*Total*	
Act of grace	124	143	57	324	121
Seamen's war pension	81	110	74	265	85
New Guinea civilians	1	. .	80	81	82
Total	**206**	**253**	**211**	**670**	**288**

(*a*) 'Member' in this context is a person in respect of whose wartime experience a pension is paid.

MISCELLANEOUS WAR PENSIONS: AMOUNT PAID, STATES, ETC. 1963-64 TO 1967-68
($'000)

Place of payment	*1963–64 (a)*	*1964–65*	*1965–66 (a)*	*1966–67*	*1967–68*
New South Wales(*b*)	150	156	161	148	159
Victoria	71	70	76	71	71
Queensland	45	42	46	44	44
South Australia(*c*)	35	30	34	29	29
Western Australia	17	17	20	20	20
Tasmania	5	4	4	4	4
Abroad	. .	1	3	1	1
Total	**323**	**321**	**344**	**317**	**328**

(*a*) Includes five 12-weekly payments. (*b*) Includes Australian Capital Territory. (*c*) Includes Northern Territory.

Service pensions

The *Repatriation Act* 1920–1968 provides for a service pension to be paid, subject to a means test of income and property, to the following persons:

ex-servicemen who served in a theatre of war and have attained the age of sixty years or are permanently unemployable;

ex-servicemen who suffer from pulmonary tuberculosis, irrespective of the area of their service; and

ex-servicewomen who suffer from tuberculosis, or who served in a theatre of war, or served abroad or embarked for service abroad and have attained the age of fifty-five years, or are permanently unemployable.

Rates of pension

The maximum rate of service pension is the same as that paid to an age or invalid pensioner by the Department of Social Services. An ex-serviceman receives a pension of $14 a week and his wife $7 a week. If, however, an ex-serviceman's wife is receiving a social service pension, a tuberculosis allowance or a service pension as a member of the forces, his rate is $12.50 a week and no Repatriation pension is payable to his wife. The service pension of an ex-serviceman is increased by $2.50 a week for each eligible child and, in addition, a pension of 25c a week is payable in respect of the second, third and fourth of such eligible children. *Eligible child* means a child of a service pensioner under the age of sixteen years, or a child over that age who is wholly or substantially dependent on the pensioner and is undergoing full-time education, in which case pension may continue until the child's twenty-first birthday.

Supplementary assistance of $2.00 a week is paid in addition to service pension to an ex-serviceman who is paying rent, or for lodging, or board and lodging, and whose *means as assessed* do not exceed $1.00 a week or $2.00 a week if he is married. (The allowance is reduced if the *means as assessed* exceed these amounts.)

A service pensioner who is unmarried, widowed, divorced, or married but separated, and who has care and control of one or more children, qualifies for a guardian's allowance of $4.00 a week.

The means test sets limits to the amount of income or property which a pensioner may have for the purpose of service pension. The amount of service pension payable depends upon the claimant's *means as assessed*, which consist of his annual rate of income plus a property component equal to $1.95 for each complete unit of $20 of net value of property above $400. For married couples, except where they are separated or in other special circumstances, the income and property of each for purposes of applying the means test is taken to be half the total income and property of both, even if only one is a pensioner or claimant. A person's *means as assessed* may consist entirely of income, entirely of property, or of both income and property components. If a single person's *means as assessed* do not exceed $10 a week, he receives the maximum rate of pension. If his *means as assessed* exceed $10 a week, the rate payable is the maximum rate less the amount by which *means as assessed* exceed $10 a week. If his *means as assessed* are $24 a week or more, no service pension is payable.

Income means earnings and other forms of income derived from any source, with certain exceptions, of which the principal are: certain income derived from property; gifts or allowances from children, parents, brothers or sisters; benefits from friendly societies; child endowment; Commonwealth health benefits. The value of board and lodging received by a pensioner, either free or in return for services, is normally assessed as income at $1.25 a week. Property includes all real and personal property, such as houses, land, money in hand, in a bank or on loan, shares, investments or legacies, vehicles used for business purposes, and livestock. Property does not include an applicant's permanent home, furniture or personal effects, the surrender value of life insurance policies (up to $1,500), the value of any reversionary interest, the capital value of any life interest, annuity or contingent interest, or vehicles maintained only for personal use.

Eligibility for service pensions was extended on 1 November 1941 to veterans of the South African War 1899–1902 and in 1943 to members of the Forces of the 1939–45 War. Members of the Forces who served in Korea and those who served in Malaya prior to the commencement of the *Repatriation (Far East Strategic Reserve) Act* 1956–1966 are also eligible. During 1968, eligibility was extended to members of the forces under the *Repatriation (Special Overseas Service) Act* 1962–1968.

An ex-serviceman or ex-servicewoman in receipt of a service pension is entitled, with certain exceptions, to free medical benefits for disabilities not caused by war. These benefits include general practitioner service, specialist service where necessary, full pharmaceutical benefits, surgical aids and appliances (including spectacles), dental treatment, and treatment in Repatriation General Hospitals.

Operations

SERVICE PENSIONS: SUMMARY, AUSTRALIA, 1967-68

	South African War	1914–18 War	1939–45 War(*a*)	Korea-Malaya operations	Miscellaneous (*b*)	Total
New claims granted	8	2,406	6,439	25	2	8,880
Restorations	..	437	609	6	..	1,052
Cancellations (gross) . . .	1	1,501	2,502	12	1	4,017
Deaths	22	3,290	1,056	5	..	4,373
Pensions in force at 30 June 1968 .	174	40,300	27,930	101	22	68,527
Annual liability at 30 June 1968 $'000	84	20,049	11,262	33	8	31,436
Amount paid in pensions during 1967–68 . . . . $'000	n.a.	n.a.	n.a.	n.a.	n.a.	31,771

(*a*) Includes native members of the forces. (*b*) Act of grace pensions.

SERVICE PENSIONS: SUMMARY, AUSTRALIA, 1963–64 TO 1967–68

	1963–64	1964–65	1965–66	1966–67	1967–68
New claims granted	10,026	8,273	8,048	8,578	8,880
Restorations	1,065	1,035	1,052	1,056	1,052
Total additions	*11,091*	*9,308*	*9,100*	*9,634*	*9,932*
Cancellations (gross)	4,679	4,948	4,259	4,197	4,017
Deaths	3,573	3,947	4,000	4,362	4,373
Total reductions	*8,252*	*8,895*	*8,259*	*8,559*	*8,390*

Classes of service pensions

The following tables give an analysis of the total number of new claims granted and pensions in force for 1967–68.

SERVICE PENSIONS: NEW CLAIMS GRANTED, AUSTRALIA, 1967–68

Class	South African War	1914–18 War	1939–45 War(*a*)	Korea-Malaya operations	Miscellaneous	Total
Ex-servicemen	8	1,743	3,887	17	2	5,657
Wives and widows of ex-servicemen .	..	617	1,387	2	..	2,006
Children	..	46	1,165	6	..	1,217
Other	..	..	..	..	..	..
Total	**8**	**2,406**	**6,439**	**25**	**2**	**8,880**

(*a*) Includes native members of the forces.

SERVICE PENSIONS: NUMBER IN FORCE, STATES, 30 JUNE 1968

State	South African War	1914–18 War	1939–45 War(*a*)	Korea-Malaya operations	Miscellaneous	Total
New South Wales(*b*)	35	12,865	8,721	34	..	21,655
Victoria.	34	10,915	5,962	20	11	16,942
Queensland	32	6,462	5,964	20	3	12,481
South Australia(*c*)	35	4,611	2,510	9	4	7,169
Western Australia	33	4,036	3,502	11	4	7,586
Tasmania	5	1,411	1,271	7	..	2,694
Australia	**174**	**40,300**	**27,930**	**101**	**22**	**68,527**

(*a*) Includes native members of the forces. (*b*) Includes Australian **Capital Territory.** (*c*) Includes Northern Territory.

Number, by class, of service pensions and amount paid

The following tables show the number of each class of service pension in force, the annual liability and the amounts paid for the years 1963–64 to 1967–68.

SERVICE PENSIONS: NUMBER OF EACH CLASS OF PENSION AND ANNUAL LIABILITY AUSTRALIA, 1963-64 TO 1967-68

	Number of service pensions at 30 June payable to—							
	Ex-servicemen who are—			*Dependants(a) of ex-servicemen where the ex-serviceman is—*				
Year	***Aged ex-servicemen***	***Permanently unemployable***	*Suffering from pulmonary tuberculosis*	*Aged or permanently unemployable*	*Suffering from pulmonary tuberculosis*	*Miscellaneous*	*Total*	*Annual pension liability at 30 June ($'000)*
1963–64 .	32,855	14,527	1,122	14,817	1,466	1	64,788	24,652
1964–65 .	33,959	14,296	1,080	14,480	1,354	9	65,178	25,685
1965–66 .	34,403	14,396	1,070	14,716	1,299	10	65,894	26,637
1966–67 .	34,814	14,512	1,073	15,421	1,152	21	66,993	31,239
1967–68 .	35,254	14,874	1,049	16,237	1,091	22	68,527	31,436

(*a*) Includes dependants of deceased service pensioners.

SERVICE PENSIONS: AMOUNT PAID, STATES, ETC.
1963-64 TO 1967-68
($'000)

Place of payment	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
New South Wales(*a*) .	7,981	8,494	9,499	9,998	10,844
Victoria . . .	5,654	5,974	6,626	6,720	7,420
Queensland . .	3,823	4,048	4,477	4,715	5,292
South Australia(*b*) .	2,689	2,766	3,025	3,134	3,416
Western Australia .	3,177	3,320	3,571	3,612	3,777
Tasmania . . .	874	904	964	935	1,014
Abroad	..	2	10	11	8
Australia . .	**24,198**	**25,508**	**28,172**	**29,126**	**31,771**

(*a*) Includes Australian Capital Territory. (*b*) Includes Northern Territory.

Medical treatment for ex-servicemen and dependants of ex-servicemen

Medical treatment is provided for all disabilities which have been accepted as due to war service. In addition, and subject to certain conditions, treatment is provided for disabilities not due to war service for: ex-servicemen and ex-servicewomen receiving war pensions at or exceeding the maximum general (100 per cent) rate; ex-servicemen who have contracted pulmonary tuberculosis; nurses who served in the 1914–18 war; widows and certain dependants of ex-servicemen whose deaths have been accepted as due to war service and of deceased T.P.I. pensioners; and service pensioners, including service pensioners of the Boer War.

In-patient treatment for eligible patients is provided at the six Repatriation General Hospitals (one in each State) and seven auxiliary hospitals and sanatoriums as follows: *New South Wales*—Lady Davidson Hospital; *Victoria*—Macleod Hospital and Anzac Hostel; *Queensland*—Kenmore Hospital and Rosemount Hospital; *South Australia*—Birralee Hospital; and *Western Australia*—The Edward Millen Hospital. The Anzac Hostel specialises in the care and treatment of long-term patients.

The total number of available beds for patients in open wards or parts of wards in all these institutions at 30 June 1968 was 4,126, and expenditure amounted to $27,034,947. In addition, expenditure of $32,610,172 was incurred on medical services outside these institutions.

Repatriation hospitals and institutions

Details of full-time staff in Repatriation general hospitals and other Repatriation institutions are given in the following table.

REPATRIATION HOSPITALS AND INSTITUTIONS: FULL-TIME STAFF STATES, 30 JUNE 1968

Type of institution	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
General hospitals—							
Medical staff	123	88	36	27	27	8	309
Nursing staff	746	524	315	237	210	56	2,088
Other staff	1,132	802	478	313	412	110	3,247
Total, general hospitals	*2,001*	*1,414*	*829*	*577*	*649*	*174*	*5,644*
Other in-patient institutions(*a*)	218	122	170	36	43	..	589
Out-patient clinics(*a*)	173	81	24	35	25	..	338
Limb and appliance centres(*a*)	77	69	28	20	13	11	218
Grand total	**2,469**	**1,686**	**1,051**	**668**	**730**	**185**	**6,789**

(*a*) Total staff.

The following table gives details of in-patients treated at Repatriation general hospitals and other Repatriation institutions in each State. The figures shown refer to cases, e.g. a person who is admitted to hospital twice during a year is counted twice.

REPATRIATION GENERAL HOSPITALS AND INSTITUTIONS: IN-PATIENTS TREATED, STATES, 1967-68

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
REPATRIATION GENERAL HOSPITALS							
In-patients at beginning of year	1,307	693	473	286	368	101	3,228
Admissions and re-admissions during year	19,636	11,536	9,219	5,327	5,732	1,757	53,207
Total in-patients treated	*20,943*	*12,229*	*9,692*	*5,613*	*6,100*	*1,858*	*56,435*
Discharges	18,691	10,594	8,758	4,942	5,300	1,674	49,959
Deaths	1,108	898	459	353	392	88	3,298
In-patients at end of year	1,144	737	475	318	408	96	3,178
Average daily number resident	1,179	675	440	302	362	98	3,056
OTHER REPATRIATION INSTITUTIONS							
In-patients at beginning of year	184	112	130	31	19	..	476
Admissions and re-admissions during year	1,374	417	1,022	129	280	..	3,222
Total in-patients treated	*1,558*	*529*	*1,152*	*160*	*299*	..	*3,698*
Discharges	1,341	420	1,010	129	259	..	3,159
Deaths	40	8	13	3	3	..	67
In-patients at end of year	177	101	129	28	37	..	472
Average daily number resident	172	104	122	30	27	..	455

In addition to the Repatriation institutions, eligible patients may be treated in other country and metropolitan hospitals and nursing homes at Repatriation expense. During 1967–68, 14,707 Repatriation in-patients were accommodated and treated in hospitals and 869 in nursing homes.

Repatriation psychiatric patients requiring custodial care are, by agreement with the State Governments, accommodated at the expense of the Repatriation Department in separate wings of psychiatric hospitals administered by the State authorities. Excluding 117 on trial leave, there were 818 Repatriation patients in these hospitals at 30 June 1968.

Out-patient treatment is provided throughout the Commonwealth at Repatriation hospitals and clinics and through the Repatriation Local Medical Officer Scheme. During 1967–68, 611,772 out-patients were treated at Repatriation institutions, and visits to or by local medical officers totalled 2,709,367.

General Repatriation benefits and miscellaneous

Other Repatriation Department activities

In addition to the payment of pensions and the provision of medical treatment, the Department also provides various benefits and allowances designed to meet the needs of special classes of ex-servicemen and their dependants.

These include educational and vocational training schemes, namely the *Soldiers' Children Education Scheme* (full details of which appear later in this section), the *Korea and Malaya Training Scheme*, the *Disabled Members' and Widows' Training Scheme* and the *National Service Vocational Training Scheme.*

In addition, gift cars and an annual allowance for their upkeep are provided for ex-servicemen who, as a result of war service, have suffered the amputation of both legs above the knees or amputation of one leg above the knee plus any two other amputations (above the ankle or at or above the wrist) or complete paraplegia resulting in the total loss of the use of both legs. A grant of up to $50 may be made towards the funeral expenses of eligible ex-servicemen and certain of their dependants. Payment of up to $10 may be made to provide such necessities as meals, sleeping accommodation etc., for ex-servicemen in need of immediate relief. Also certain concessions in telephone charges are provided for some classes of ex-servicemen and their dependants, including war blinded ex-servicemen, war widows and certain service and special rate war pensioners. Ex-servicemen who have been blinded as a result of war service may be issued with talking book machines. The Australian Red Cross Society supplies 'book' records for these machines, free of charge, thus enabling the blinded to enjoy a wide range of literature.

Expenditure in 1967–68 on general Repatriation benefits for all wars was $4,226,000, comprising; Soldiers' Children Education Scheme, $2,720,000; recreation transport allowance, $618,000; and other benefits $888,000. In addition, $24,000 was expended by other Commonwealth authorities on Repatriation employment and vocational training.

Soldiers' Children Education Scheme

The Soldiers' Children Education Scheme was established in 1921 and operates with the assistance of the voluntary Education Boards in each State. These Boards consist of representatives of government and non-government education authorities and of ex-service and other organisations which have a general interest in the welfare of the children of ex-servicemen. The objects of the Scheme are to assist and encourage eligible children in acquiring a standard of education compatible with their aptitude and ability, and to prepare them to enter an agricultural, commercial, professional, or industrial calling of their own choice.

Eligible children. Eligible children are children of ex-servicemen whose deaths have been accepted as due to war service; or of ex-servicemen who died from causes not due to war service but who were receiving at the date of death a war pension at a special rate for blindness, total and permanent incapacity, pulmonary tuberculosis, or amputation of two or more limbs; or of ex-servicemen who, as a result of war service, are blinded, totally and permanently incapacitated, or receiving the special rate pension for pulmonary tuberculosis and are likely to receive such pension for a period of at least three years.

General benefits. From the commencement of primary education up to twelve years, school requisites and fares are provided. An education allowance is also payable for a child from commencement of secondary education or from the age of twelve years, whichever is the earlier, while the child is undertaking primary or secondary education. Further assistance beyond, or parallel with, the later years of secondary education is provided where an approved beneficiary continues with a course of specialised education or training necessary for a career. Specialised education covers a wide range and may include: professional degree or diploma courses at universities and technical colleges; theological training; cadet and pupilage training, i.e. training combined with employment, such as nursing, pharmacy and journalism; industrial, including apprenticeship training, and other courses of trade and business training approved by an Education Board; and agricultural training at an agricultural college. At this stage of training, in addition to the education allowance, fees are paid and text books, essential equipment and other minor benefits are provided.

All education allowances are subject to an allowed income limit test, i.e. the amount of education allowance payable depends on the amount of income a child receives over the allowed limit. The child's income for the purpose of determining the allowance payable means earnings from employment and other earnings from personal exertion and such portion of a scholarship, bursary or grant as the Education Board determines to be income. Income does not include war or service pensions paid for the child or any similar payment, income the child receives from private means, or income from casual employment during the entire period of a school or university vacation where the student is to continue as a full-time student under the scheme after the vacation. The parent's income does not affect the child's allowance. The scale of maximum allowances payable to eligible children at various stages of education is as follows.

SOLDIERS' CHILDREN EDUCATION SCHEME WEEKLY RATES OF ALLOWANCES, OCTOBER 1968

($)

Type of training	*Living at home*	*Living away from home*
At school—		
Aged 12 and under 14 years .	2.18	7.28
Aged 14 „ „ 16 years .	3.30	7.28
Aged 16 „ „ 18 years .	7.28	11.25
Professional (university, etc.) . .	10.75	17.40
Agricultural	..	3.65
Industrial (apprenticeship, etc.) .	2.65	5.30

The following tables show the costs of education under the scheme for the year ended 30 June 1968 and the number of children in receipt of benefit at 30 June 1968.

SOLDIERS' CHILDREN EDUCATION SCHEME: EXPENDITURE, 1967-68

($'000)

	N.S.W. (*a*)	*Vic.*	*Qld*	*S.A.* (*b*)	*W.A.*	*Tas.*	*Aust.*
Cost of education of beneficiaries—							
Under 12 years of age . . .	9	8	8	3	1	2	31
12 years of age and over . . .	929	740	481	248	171	102	2,671
Total expenditure . . .	**938**	**748**	**489**	**251**	**172**	**104**	**(*c*)2,702**

(*a*) Includes Australian Capital Territory (*b*) Includes Northern Territory. (*c*) Excludes overseas expenditure of $18,000.

SOLDIERS' CHILDREN EDUCATION SCHEME: NUMBER RECEIVING BENEFITS(*a*) AT 30 JUNE 1968

Type of training	*N.S.W.* (*b*)	*Vic.*	*Qld*	*S.A.* (*c*)	*W.A.*	*Tas.*	*Abroad*	*Total*
At school—								
Aged under 14 years(*d*) .	858	588	487	201	158	135	7	2,434
Aged 14 and under 16 years	1,071	780	487	248	195	172	15	2,968
Aged 16 and under 18 years	754	538	316	188	107	73	12	1,988
Total at school . .	*2,683*	*1,906*	*1,290*	*637*	*460*	*380*	*34*	*7,390*
Professional	370	377	213	148	73	43	13	1,237
Agricultural	6	9	12	..	5	..	..	32
Industrial	..	11	..	..	..	..	..	11
Grand total . . .	**3,059**	**2,303**	**1,515**	**785**	**538**	**423**	**47**	**8,670**

(*a*) Refers only to children in receipt of an education allowance. (*b*) Includes Australian Capital Territory. (*c*) Includes Northern Territory. (*d*) From 12 years of age or the commencement of secondary education, whichever is the earlier.

Settlement of returned service personnel on the land

Reference to the settlement of returned service personnel on the land will be found in the chapters Public Finance and Rural Industry.

Re-establishment benefits for national servicemen

Subject to prescribed conditions, special re-establishment benefits are provided for national servicemen under the *Defence (Re-establishment) Act* 1965–1968. They apply to all national servicemen whether or not they have served on 'special service' and ensure that servicemen will not be at a disadvantage on their return to civil life. The scheme includes appropriate full or part-time training as a supplement to skills acquired in the Army, refresher training for specialists and training for those who, for various reasons, may not be able to return to their former employment. The assistance includes payment of tuition fees, other associated fees and fares, and provision of books and equipment as appropriate. A training allowance is also provided for trainees undertaking full-time studies.

Re-establishment loans may be granted, subject to certain conditions, to those national servicemen who, prior to call-up, were engaged in professional practice, business, or agricultural occupations, or who, because of their call-up, were prevented from engaging in these occupations, and who are in need of financial assistance for their re-establishment in civil life.

The maximum amounts of the loans are business and professional $3,000, agricultural $6,000.

Expenditure by the Repatriation Department, 1967-68

The net expenditure by the Department for the year ended 30 June 1968 was $276,797,400 distributed as follows:

	$'000
Pensions, allowances and other benefits	200,446
Medical treatment	59,645
Administration	12,292
Works, rent and maintenance	4,414
Total	**276,797**

The Services Canteens Trust Fund

The Services Canteens Trust Fund was established under the *Services Trust Funds Act* 1947. Its funds are derived from the assets and profits of wartime services canteens, mess and regimental funds of disbanded units, and several other sources.

The total amount transferred to the Fund to 31 December 1968 was $11,055,041. The Act prescribed that, of this, $5 million and such further amounts as the trustees of the Fund might from time to time decide, should be devoted to the provision of education facilities for the children of eligible ex-servicemen and ex-servicewomen, and that the balance of the Fund should be used to provide relief for ex-servicemen and ex-servicewomen and their dependants in necessitous circumstances.

The Fund is administered by eleven honorary trustees appointed by the Governor-General. The trustees have power to determine the persons or groups of persons to benefit from the Fund and the extent of the benefits to be granted within the provisions of the Act, and to appoint regional committees to assist with the administration. Members of regional committees are all persons who served in the 1939–45 War or are widows of men who served during the war. They serve in an honorary capacity.

Assistance from the Fund

Persons eligible for assistance from the Fund are those who, between 3 September 1939 and 30 June 1947, served in the Australian Naval, Military or Air Forces, including members of the canteens staff of any ship of the Royal Australian Navy, persons duly accredited to any part of the Defence Forces who served in an official capacity on full-time paid duty, and their dependants. The trustees have introduced schemes for providing welfare relief for ex-servicemen and ex-servicewomen who are eligible for benefits, and for their dependants; benefits for children of eligible ex-servicemen and ex-servicewomen who are suffering from serious and incapacitating afflictions; and education benefits for the children of eligible ex-servicemen and ex-servicewomen. From its inauguration in 1947 the Fund is to be available for forty years for welfare relief and for thirty years for educational benefits.

Welfare relief. The trustees have prescribed a policy for welfare relief which makes assistance available only to those who are in genuine distress from which they cannot extricate themselves by their own efforts. To 31 December 1968, $3,362,102 has been granted as welfare relief from the Fund,

$2,013,080 to ex-servicemen and their dependants, and $1,349,022 to widows and orphans. The amount granted during 1968 was $136,311. A total of 34,927 ex-servicemen and ex-servicewomen and 18,813 widows and orphans were granted welfare assistance from the Fund to 31 December 1968.

Assistance under Afflicted Children's Scheme. The Fund assists dependent children suffering from afflictions which permanently disable or seriously retard their progress or prevent the enjoyment of normal health and strength, and who face a prospect of dependence on others for all or part of their lives. The extent to which assistance will be granted in a particular case depends largely on the nature of the child's affliction, the facilities available, the family circumstances, and the funds that can be made available. Up to 31 December 1968, 2,650 afflicted children had been assisted under the Afflicted Children's Scheme, involving an expenditure of $310,206. The amount granted during 1968 was $8,504. The number of new children assisted in 1968 was 27.

Educational Assistance Scheme. Educational assistance is restricted to children who are fifteen years of age and over, fourteen years and over in the case of orphans and where there are exceptional circumstances. The object is to assist eligible children to obtain the highest education within their capacity. Assistance is in the form of awards ranging up to $300 a year depending on the nature of the course undertaken and the family circumstances. These awards are granted chiefly for children at secondary education level, but are also available for other types of education.

The number of children assisted under the educational assistance scheme to 31 December 1968 was 54,808, and the expenditure on educational assistance to 31 December 1968 was $7,321,349. The number of awards granted in 1968 was 6,274 at a value of $425,518.

Total assistance. The total assistance granted under the three schemes during 1968 was $570,333 and from the inception of the Fund to 31 December 1968 totalled $10,993,657.

CHAPTER 6

INTERNATIONAL RELATIONS

Relations with Commonwealth and other countries

Australia's international relations have developed steadily since its attainment of nationhood at the beginning of this century. Initially, association with Britain and co-operation with the Commonwealth countries were a major preoccupation. These links remain important principles of foreign policy. Australia also maintains particularly close relations with the United States of America and is continuing to foster regional association with the countries of Asia.

Commonwealth relations

In addition to being represented at the meetings of Commonwealth Prime Ministers, Finance Ministers, and Ministers for Trade, Australia belongs to the sterling area, retains the system of judicial appeal from the States' courts to the Privy Council, maintains High Commissions in 14 other Commonwealth countries, and is a member of the main Commonwealth organisations providing for co-operation in economic, scientific, educational, and other fields.

Relations with the United States of America

An important feature of Australia's international relations is its relationship with the United States of America. This relationship is formally expressed in the ANZUS Treaty which was signed pursuant to Articles 51 and 52 of the United Nations Charter. It provides that, in the event of armed attack on any one of them in the Pacific, the United States, Australia, and New Zealand would each act to meet the common danger in accordance with its constitutional processes.

Australia and Asia

Geographical location to the south of Asia has become an increasingly important factor in Australia's foreign policy. Australia is active as a member of the South-East Asia Treaty Organisation (SEATO), as a regional member of the United Nations Economic Commission for Asia and the Far East (ECAFE), as a member of the Colombo Plan Consultative Committee of the Asian Development Bank, and of the Asian and Pacific Council (ASPAC); and also in commercial and professional associations.

United Nations

From the time of the drafting of the United Nations Charter, Australia has taken an active role in that organisation, primarily through participation in the General Assembly but also through membership of the Security Council (1946–47 and 1956–57), the Economic and Social Council (1948–50, 1953–55 and 1962–64), and the Trusteeship Council.

Contributions are made to various forms of international aid through the United Nations and other international agencies.

SEATO

Following the cessation of fighting in Indo-China in 1954, Australia, with a number of other countries situated in the south-east Asian region, or having responsibilities there, supported a proposal to form a collective defence alliance to guarantee the peace and security of the region from external aggression. On 8 September 1954 Australia, France, New Zealand, Pakistan, the Philippines, Thailand, the United Kingdom and the United States signed the South-East Asian Collective Defence Treaty at Manila. They also signed a Pacific Charter stating the principles on which they had acted. A Protocol to the Treaty extended its operation to Cambodia, Laos and the free territory under the jurisdiction of the State of Vietnam, although no action on these territories would be taken except at the invitation or with the consent of the government concerned.

While primary emphasis has been placed on the defence significance of the Treaty, an organisation has been established in Bangkok to co-ordinate activities to combat subversion both by counter-propaganda and security training and by the development of the economic and social welfare of the peoples of the Treaty Area. To facilitate this task the Australian Government in 1956 instituted a

SEATO Aid Programme, under which by 30 June 1968 aid to the value of $19.02 million had been given to member countries in Asia to help develop their capacity to resist aggression and subversion and to stimulate economic development. This programme is complementary to Australia's Colombo Plan contribution. Australian SEATO aid projects, completed or in progress, include the provision of geodetic survey vessels for the Philippines; military technical training schools, a vehicle base repair shop, and two 50 kW radio transmitters to Thailand; telecommunications, technical training and workshop equipment to Pakistan; corrugated iron, town water supply systems for Bien Hoa and Can Tho, four surgical teams, and school textbooks for Vietnam. Australia has also provided military training, and technical training in the fields of engineering, telecommunications, naval architecture and dockyard maintenance, Security procedures, and surveying for more than 245 trainees from Asian member countries. In addition a number of senior service officers of other member countries have visited Australia to foster understanding and to develop co-operation between the armed forces.

The Colombo Plan

The Colombo Plan originated at a meeting of Commonwealth Foreign Ministers in Colombo in January 1950. The meeting set up a consultative committee to review economic development in south and south-east Asia. The task of this committee was to devise the most effective means of tackling the problems of economic development in the area and of focusing world attention on them.

Membership of the consultative committee is now made up of Australia, Canada, Ceylon, India, New Zealand, Pakistan, the United Kingdom, Malaysia, the United States, Burma, Cambodia, Indonesia, Japan, Laos, Nepal, the Philippines, Thailand, Vietnam, Korea, Bhutan, the Maldive Islands, Afghanistan, Singapore, and Iran.

Australia has placed emphasis on the importance of technical assistance in providing a base for economic development. A summary of expenditure, by country and under different heads, is set out in the following table.

AUSTRALIA'S EXPENDITURE UNDER THE COLOMBO PLAN TO 30 JUNE 1968
($'000)

Country	*Economic development*	*Technical assistance*				*Grand total*
		Training	*Experts*	*Equipment*	*Total*	
Afghanistan	..	119.8	3.7	0.3	123.8	123.8
Bhutan	293.2	..	..	..	..	293.2
Brunei	..	81.2	1.0	..	82.2	82.2
Burma	4,744.6	1,463.9	142.5	902.8	2,509.2	7,253.8
Cambodia	2,897.6	246.9	263.2	224.3	734.4	3,632.0
Ceylon	10,073.4	1,114.1	428.2	380.5	1,922.8	11,996.2
India	29,620.3	2,215.2	329.9	775.1	3,320.2	32,940.5
Indonesia	(*a*)14,245.2	5,623.3	1,261.6	643.4	7,528.3	21,773.5
Iran	..	1.8	..	..	1.8	1.8
Korea	73.6	584.2	46.7	245.1	876.0	949.6
Laos	1,708.7	417.7	164.8	585.8	1,168.3	2,877.0
Malaysia	5,331.5	8,226.7	2,314.2	1,698.2	12,239.1	17,570.6
Maldives	..	35.5	..	0.6	36.1	36.1
Nepal	266.5	292.1	96.0	32.3	420.4	686.9
Pakistan	25,163.4	1,928.8	600.0	989.9	3,518.7	28,682.1
Philippines	86.0	1,398.1	201.4	646.4	2,245.9	2,331.9
Singapore	..	2,224.1	646.1	1,051.2	3,921.4	3,921.4
Thailand	9,092.8	2,728.4	710.4	928.3	4,367.1	13,459.9
Vietnam	3,675.5	1,784.9	450.6	1,007.2	3,242.7	6,918.2
General—						
Mekong Project	..	..	342.2	130.0	472.2	472.2
Australian volunteers abroad	..	..	55.8	..	55.8	55.8
Miscellaneous	632.2	..	..	..	3,240.8	3,873.0
Total	**107,904.5**	**30,486.7**	**8,058.3**	**10,241.4**	**(*b*)52,027.2**	**159,931.7**

(*a*) Includes $4,750,000 emergency aid. (*b*) Includes $3,240,800 miscellaneous.

Economic development aid

Most of Australia's contribution under the Colombo Plan has been spent on providing predominantly Australian-made equipment for developmental projects or on gifts of commodities such as wheat, flour, fertiliser, coal, copper, and condensed milk which have been sold in the recipient country to raise counterpart funds for agreed developmental projects.

The projects assisted by Australia cover a wide range, including irrigation and preparation of land for food crops, irrigation and electric power projects, secondary industries, municipal services, road building, transport and communications facilities, broadcasting equipment, and lignite mining.

A Technical Co-operation Scheme has been an integral part of the Colombo Plan since its inception in 1950. Co-ordination of technical assistance is provided by a Council for Technical Co-operation, which meets regularly in Colombo, served by a Colombo Plan Bureau.

Technical assistance

The main fields of study covered by awards for training in Australia under the Colombo Plan include engineering, public administration, education, nursing, science, medicine and health, and agriculture. Substantial numbers have also been trained in such fields as accountancy, arts, economics, food technology, social studies, and industry. Main fields of study under the correspondence scholarship scheme inaugurated by Australia in 1955 are accountancy, engineering, English, and trade courses.

The following table shows the number of training awards and experts provided to Colombo Plan countries by Australia up to 30 June 1968.

AUSTRALIA: TRAINING AWARDS AND EXPERTS PROVIDED UNDER COLOMBO PLAN TO 30 JUNE 1968

Country	*Training awards*	*Correspondence awards*	*Expert assignments*
Afghanistan	51	..	2
Brunei	24	13	6
Burma	490	360	37
Cambodia	67	..	43
Ceylon	432	629	82
India	864	303	73
Indonesia	1,210	286	120
Iran	2	..	..
Korea	238	..	4
Laos	119	..	20
Malaysia	1,764	2,241	285
Maldives	15	..	..
Nepal	68	..	12
Pakistan	569	..	88
Philippines	560	72	35
Singapore	514	324	156
Thailand	660	81	173
Vietnam	349	..	50
General, etc.	..	..	27
Total	**7,996**	**4,309**	**1,213**

The range of items supplied as technical equipment includes text books and Australian reference books for schools, universities and technical training institutions; equipment and tools for technical education; livestock and equipment for breeding programmes; radio receivers for use in remote areas; film projectors and visual aids for training centres; X-ray equipment for hospitals; and agricultural research equipment.

In addition to training awards, experts and equipment, technical assistance funds have been spent on contributions to the Colombo Plan Bureau, publications, International House, training centres, and the ECAFE Asian Economic Development Institute.

Participation in the United Nations

Australia's contributions to the United Nations

Australia played an active part in drafting the Charter of the United Nations at the Conference on International Organization in San Francisco in 1945 and has been a consistent supporter of the principles and objectives of the United Nations since its foundation. Australia's influence in the affairs of the United Nations has been exerted primarily through the annual debates in the General Assembly, through membership of the Security Council (1946–47 and 1956–57) and the Economic and Social Council (1948–50, 1953–55 and 1962–64), and through the Trusteeship Council. By virtue of responsibility for the administration of the Trust Territory of Nauru prior to Nauru's independence in

January 1968 and the continuing administration of the Trust Territory of New Guinea, Australia has been a member of the Trusteeship Council, as an administering power, since the Council's establishment.

In 1950 Australia joined fifteen other member States in answering the Security Council's call to help the Republic of Korea to repel Communist aggression from the north, and members of all three armed services took part in the three years of fighting which followed. Australia has also been directly involved in United Nations activities in many other parts of the world. Australia has contributed its share of the costs, both assessed and voluntary, of all United Nations peace-keeping operations, the largest of which have been the United Nations Emergency Force (UNEF) in the Middle East in 1956–67, the United Nations Operation in the Congo (ONUC) in 1960–64, and the United Nations Force in Cyprus (UNFICYP) since 1964. In addition to financial contributions, an element of fifty Australian policemen has been made available for service with UNFICYP.

Australia was a member, in 1968, of the Ad Hoc Committee on the Sea-bed and was appointed to membership of the Permanent Committee established by the Twenty-third General Assembly. In 1968 also Australia was a member of the Committee on Defining Aggression.

In the economic, social and cultural sphere Australia has contributed to the work of the United Nations through membership of its specialised agencies and of the Economic and Social Council. Australia is a foundation member of one of the four Regional Economic Commissions—the Economic Commission for Asia and the Far East, the 4th, 15th and 23rd Sessions of which were held in Australia. In 1963 Australia became a regional member of ECAFE.

Australia has had varying periods of service as a member of the executive bodies of the principal specialised agencies. As a leading agricultural country, Australia played a large part in the establishment of the Food and Agriculture Organization (F.A.O.). Australia is a member of the Board of Governors of the International Atomic Energy Agency. Australia served as a member of the governing body of the International Labour Organisation either as a titular government member or as a deputy member from 1945 to 1960, and in 1963 was again elected to the governing body as a titular government member for a further three-year term. In 1966 Australia was elected for a further three years as a Deputy Government Member. It is also a member of the Executive Board of the World Health Organization, the Administrative Council of the International Telecommunications Union, the Executive Committee of the World Meteorological Organization, and the Council of the Inter-Governmental Maritime Consultative Organisation.

Australia has also been a prominent member of the International Civil Aviation Organization since its inception, and in 1962 was re-elected to the Council as one of the nine States of principal civil aviation importance. Australia was a member of the executive board of the United Nations Children's Fund (UNICEF) from 1947 to 1961 and was re-elected in 1966 for a three-year term.

Australia's contributions in international aid

Australia's contributions towards various forms of multilateral aid through the United Nations and other international organisations to June 1968 amounted to about $178,953,000. This is additional to the funds provided for the Colombo Plan and the cash grant for the development of Papua and New Guinea.

The Australian Government contributed $7,527,000 to the United Nations Expanded Programme of Technical Assistance (EPTA) from the inception of the Programme in 1950 to December 1965. This was spent on the provision of experts, training, supplies, and equipment, and supplemented Australian aid under the Technical Co-operation Scheme of the Colombo Plan. Australia also contributed $1,500,000 to the Special Fund to December 1965. EPTA and the Special Fund were merged on 1 January 1966 into the United Nations Development Programme (UNDP) and Australia's contribution to the Programme to 30 June 1968 was $3,047,000.

Other contributions by Australia (to June 1968) have included $45,044,000 to the United Nations Relief and Rehabilitation Administration (UNRRA); $6,594,000 to the International Refugee Organization; $3,660,000 to Post-UNRRA Relief: $14,536,000 for food and medical supplies to the United Nations Children's Fund (UNICEF), which has been helping the under-privileged children of the world since its establishment in 1946; $3,598,000 of essential supplies to the United Nations Korean Reconstruction Agency; $3,500,000 of supplies to the United Nations Relief and Works Agency for Palestine refugees; $1,577,000 for the programmes for the United Nations High Commissioner for Refugees; and $96,000 for the WHO Malaria Eradication Special Account.

Australia has also contributed $530,000 to the Intergovernmental Committee for European Migration's programme for providing transportion from Hong Kong to countries of resettlement for refugees of European origin coming out of mainland China.

In addition, Australia has made significant contributions to the development funds of international financial institutions; to June 1968 these amounted to $47,590,000 to the International

Bank for Reconstruction and Development, $1,996,000 to the International Finance Corporation, $27,913,000 to the International Development Association, and $7,590,000 to the Asian Development Bank.

In 1962 Australia supported the establishment of the UN/FAO World Food Programme and has contributed $2,377,000 in cash and kind to the Programme.

Diplomatic representation

The Department of External Affairs is responsible for advising the Minister for External Affairs and the Australian Government on the conduct of foreign affairs and relations with foreign Governments. Its officers staff the Australian diplomatic service and the consular and administrative service.

Australian missions overseas

In December 1968 Australia maintained the following diplomatic and consular missions abroad.

AUSTRALIAN MISSIONS OVERSEAS

Embassies (39)

Argentina—Calle Rivadavia 1829, Piso 5, Buenos Aires.
Austria—Concordia-platz 2/3, Vienna 1.
Belgium—51/52 Avenue des Arts, Brussels-4.
Brazil—Caiza Postal 251-ZC-00, Rio de Janeiro.
Burma—88 Strand Road, Rangoon.
Cambodia—94 Moha Vithei Preah Norodom, Phnom Penh.
Chile—Casilla No. 14427, Correo 15, Santiago de Chile.
China—Arcadia Building, 402 Tun Hua South Road, Taipei.
Ethiopia[*]—C/o Australian High Commission, Nairobi, Kenya.
Finland[†]—C/o Australian Embassy, Stockholm, Sweden.
France—13 Rue Las Cases, Paris 7^{e}.
Germany, Federal Republic of[‡]—Kölnerstrasse 157, Bad Godesberg, Bonn.
Greece—8 Makedonon Street, Athens.
Indonesia—Djalan Thamrin 15, Gambir, Djakarta.
Iran—Park Hotel, Hafez Ave, Tehran.
Ireland—33 Fitzwilliam Square, Dublin.
Israel—145 Hayarkon Street, Tel Aviv.
Italy—Via Sallustiana 26, Rome.
Japan—1–14 Mita 2-chome, Minato-ku, Tokyo.
Korea—32–10 Songwoldong, Sudae Moon-ku, Seoul.
Laos—Quartier Phone Xay, Boite Postale No. 292, Vientiane.
Lebanon—S.F.A.H. Building, Kantari St., Beirut.
Mexico—Paseo de la Reforma 195, 5° Paso, Mexico 5, D.F. Mexico City.
Nepal[§]—C/o Australian High Commission, New Delhi, India.
The Netherlands—Lange Voorhout 18, The Hague.
Peru[‖]—Monterosa Building, Jiron Arica 837, Lima.
The Philippines—L & S Building, 1414 Roxas Street, Manila.
South Africa—Standard Bank Building, Church Square, Pretoria.
Spain—General Sanjurjo 44, Madrid.
Sweden—Sergelstorg 12, Stockholm 40.
Switzerland[¶]—C/o Australian Embassy, Vienna, Austria.
Thailand—Anglo-Thai Building, 64 Silom Road, Bangkok.
Turkey—169 Ataturk Bulvasi, Ankara.
Union of Soviet Socialist Republics—13 Kropotkinsky Pereulok, Moscow.
United Arab Republic—1097 Corniche el Nil, Garden City, Cairo.
United States of America—1700 Massachusetts Avenue, Washington, D.C., 20036.
Uruguay[‖]—C/o Australian Embassy, Buenos Aires, Argentina.
Vietnam—Caravelle Building, Place Lam Son, Saigon.
Yugoslavia—191–3, Bulevar Revolucije, Belgrade.

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[*] The Australian High Commissioner in Kenya is concurrently Ambassador to Ethiopia.

[†] The Australian Ambassador to Sweden is concurrently Ambassador to Finland.

[‡] The Australian Ambassador is also head of the Australian Military Mission in Berlin.

[§] The Australian High Commissioner in India is concurrently Ambassador to Nepal.

[‖] The Australian Ambassador to Argentina is concurrently Ambassador to Peru and Uruguay.

[¶] The Australian Ambassador to Austria is concurrently Ambassador to Switzerland.

High Commissions (14)

*Britain**—Australia House, The Strand, London, W.C.2.
Canada—Royal Bank Chambers, 90 Sparks Street, Ottawa, 4, Ontario.
Ceylon—3 Cambridge Place, Colombo, 7.
Ghana—6/26 Milne Avenue, Airport Residential Area, Accra.
India†—No. 1/50-G Shantipath, Chanakyapuri, New Delhi.
Kenya—Jeevan Bharati Bldg, Harambee Ave, Nairobi.
Malaysia—44 Jalan Ampang, Kuala Lumpur.
Malta—Airways House, Gaiety Lane, Cnr High Street, Sliema, Valletta.
New Zealand—I.C.I. House, Molesworth Street, Wellington, N1.
Nigeria—Investment House, 21–25 Broad Street, Lagos.
Pakistan—United Bank Bldg, 54 Haider Road, Rawalpindi.
Singapore—Thornycroft House, 201 Clemenceau Ave, Singapore.
Tanzania—Bank House, Independence Avenue, Dar es Salaam.
Uganda‡—Jeevan Bharati Bldg, Harambee Ave, Nairobi.

Other (15)

Military Mission in Berlin§—Olympia Stadium, Charlottenburg 9, Berlin.

Mission to—
European Economic Community—51/52 Avenue des Arts, Brussels-4.
United Nations (*New York*)—750 Third Avenue, New York 17, New York 10020.
United Nations (*Geneva*)—56–58 Rue de Moillebeau, Petit Saconnex, 1211, Geneva 19.

Consulate-General in—
Geneva—56–58 Rue de Moillebeau, Petit Saconnex, 1211, Geneva 19.
New York—International Building, 636 Fifth Avenue, New York 20, New York 10020.
San Francisco—350 Post Street, Union Square, San Francisco, California 94108.
Milan—Via Turati 40, Milan 20121.

Consulate in—
Denmark—Hammerensgade 4, 1267, Copenhagen, K.
Germany, Federal Republic of—Hamburg 36, Neuerwall 39, Hamburg.
New Caledonia—45 Tce, Rue de Verdun, Noumea.
Portuguese Timor—Dili.
South Africa—1001 Colonial Mutual Building, 106 Adderly Street, Cape Town.

Commission in—
Fiji—C.M.L.A. Building, 3 Central Street, Suva.

Representative in—
Nauru

The Department of External Affairs is responsible for the control and administration of all the diplomatic and consular missions listed above with the exception of the High Commission, London, which is the responsibility of the Prime Minister's Department.

Specialist officers of the Trade Commissioner Service, other Commonwealth Government Departments and the Defence Services stationed abroad are attached to Australian diplomatic or consular missions. Senior attached officers are in some cases accredited to the missions with diplomatic or consular ranks approved by the Minister for External Affairs. In addition, the Department of Trade and Industry maintains Trade Commissioner posts which engage in trade promotion in a number of cities where Australia does not have diplomatic or consular representation (for complete list of Trade Commissioner posts *see* pages 114–15).

The Department of Immigration similarly maintains offices overseas which engage in recruitment of migrants. A complete list of these offices is given on pages 115–16.

Diplomatic representatives in Australia

There are thirty-nine non-Commonwealth and ten Commonwealth countries represented by diplomatic missions in Australia.

The following list shows the addresses of the overseas representatives in Australia. Full details of Commonwealth and foreign representation in Australia may be obtained from publications issued by the Department of External Affairs, Canberra. Consular representatives are not included. Particulars of these are contained in a publication *Consular and Trade Representatives in Australia*, issued by the Department of External Affairs, Canberra. There are about 300 such representatives in Australia, and sixty-five countries are represented.

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* Administered by Prime Minister's Department. † The Australian High Commissioner in India is concurrently Ambassador to Nepal. ‡ The Australian High Commissioner in Kenya is concurrently High Commissioner to Uganda. § The Australian Ambassador to Germany is also head of the Australian Military Mission in Berlin.

DIPLOMATIC REPRESENTATIVES IN AUSTRALIA

Embassies (39)

Argentina—5a Arkana Street, Yarralumla, Canberra, A.C.T. 2600.
Austria—Ainslie Building, 39 Ainslie Avenue, Civic Centre, Canberra, A.C.T. 2601.
Belgium—19 Arkana Street, Yarralumla, Canberra, A.C.T. 2600.
Brazil—6 Monaro Crescent, Forrest, Canberra, A.C.T. 2603.
Burma—85 Mugga Way, Red Hill, Canberra, A.C.T. 2603.
Cambodia—5 Canterbury Crescent, Deakin, Canberra, A.C.T. 2600.
China—70 Empire Circuit, Forrest, Canberra, A.C.T. 2603.
Denmark—5 Melbourne Avenue, Forrest, Canberra, A.C.T. 2603.
Finland—83 Endeavour Street, Red Hill, Canberra, A.C.T. 2603.
France—6 Darwin Avenue, Yarralumla, Canberra, A.C.T. 2600.
Germany, Federal Republic of—Empire Circuit, Yarralumla, Canberra, A.C.T. 2600.
Greece—22 Arthur Circle, Forrest, Canberra, A.C.T. 2603.
Indonesia—4 Hotham Crescent, Deakin, Canberra, A.C.T. 2600.
Ireland—Bank House, Civic Square, Canberra, A.C.T. 2601.
Israel—Turrana Street, Yarralumla, Canberra, A.C.T. 2600.
Italy—27 State Circle, Deakin, Canberra, A.C.T. 2600.
Japan—3 Tennyson Crescent, Forrest, Canberra, A.C.T. 2603.
Korea—42 Mugga Way, Red Hill, Canberra, A.C.T. 2603.
Laos—71 National Circuit, Deakin, Canberra, A.C.T. 2600.
Lebanon—2 Trelawney Street, Woollahra, Sydney, N.S.W. 2025.
Mexico—40 Mugga Way, Red Hill, Canberra, A.C.T. 2603.
*Nepal**—11–7, 4-chome, Minami-Azabu, Minato-ku, Tokyo, Japan.
The Netherlands—120 Empire Circuit, Yarralumla, Canberra, A.C.T. 2600.
Peru—17 Canterbury Crescent, Deakin, Canberra, A.C.T. 2600.
The Philippines—Moonah Place, Yarralumla, Canberra, A.C.T. 2600.
Portugal—22 Bougainville Street, Manuka, Canberra, A.C.T. 2603.
Romania†—No. 32–1, 5-chome, Yoyogi, Shibuya-ku, Japan.
South Africa—3 Zeehan Street, Red Hill, Canberra, A.C.T. 2603.
Spain—32 Melbourne Avenue, Deakin, Canberra, A.C.T. 2600.
Sweden—Turrana Street, Yarralumla, Canberra, A.C.T. 2600.
Switzerland—37 Stonehaven Crescent, Deakin, Canberra, A.C.T. 2600.
Thailand—9 Daly Street, Deakin, Canberra, A.C.T. 2600.
Turkey, Republic of—9 Sirius Place, Red Hill, Canberra, A.C.T. 2603.
Union of Soviet Socialist Republics—78 Canberra Avenue, Griffith, Canberra, A.C.T. 2603.
United Arab Republic—125 Monaro Crescent, Red Hill, Canberra, A.C.T. 2603.
United States of America—State Circle, Yarralumla, Canberra, A.C.T. 2600.
Uruguay—82 Dominion Circuit, Deakin, Canberra, A.C.T. 2600.
Vietnam—39 National Circuit, Forrest, Canberra, A.C.T. 2603.
Yugoslavia, Socialist Federal Republic of—27 Endeavour Street, Red Hill, Canberra, A.C.T. 2603.

High Commissioners (10)

Britain—Commonwealth Avenue, Canberra, A.C.T. 2600.
Canada—Commonwealth Avenue, Canberra, A.C.T. 2600.
Ceylon—35 Empire Circuit, Forrest, Canberra, A.C.T. 2603.
Ghana—35 Endeavour Street, Red Hill, Canberra, A.C.T. 2603.
India—63 Mugga Way, Red Hill, Canberra, A.C.T. 2603.
Malaysia—71 State Circle, Yarralumla, Canberra, A.C.T. 2600.
Malta—261 La Perouse Street, Red Hill, Canberra, A.C.T. 2603.
New Zealand—M.L.C. Building, London Circuit, Civic Centre, Canberra, A.C.T. 2601.
Pakistan—59 Franklin Street, Forrest, Canberra, A.C.T. 2603.
Singapore—81 Mugga Way, Red Hill, Canberra, A.C.T. 2603.

Agents-General for States

From early times the Australian colonies maintained agents in London to encourage immigration and to carry out commercial and financial negotiations. Since federation the States have continued to maintain Agents-General in London, all of whom work in close co-operation with the High Commissioner for Australia at Australia House, The Strand, London. The addresses of the Agents-General are as follows: New South Wales—56–7 The Strand, London, W.C.2; Victoria—Victoria

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[*] The Nepalese Ambassador to Japan is concurrently Ambassador to Australia and to New Zealand. [†] The Romanian Ambassador to Japan is concurrently Ambassador to Australia.

House, Melbourne Place, The Strand, London, W.C.2; Queensland—392 The Strand, London, W.C.2; South Australia—South Australia House, 50 The Strand, London, W.C.2; Western Australia —Western Australia House, 115 The Strand, London, W.C.2; Tasmania—458 The Strand, Charing Cross, London, W.C.2.

Overseas trade representation

The Australian Trade Commissioner Service

The Department of Trade maintains Trade Commissioners in thirty-six countries. Twenty-eight editions of the Department of Trade's promotion periodical *Austral News* now circulate in more than 100 countries in four languages. (*See also* Australian Trade Missions in the chapter Overseas Transactions.)

The addresses of Australian Trade Commissioner Posts overseas are shown in the following list.

Trade Commissioner Service of the Commonwealth of Australia

Argentina—Australian Embassy, Seccion Comercial, Lavalle 1625 Piso 11, Buenos Aires.
Austria—Australian Embassy, Concordia-platz 2/3, Vienna 1.
Bahrain—Almoayyed Building, Government Road, Bahrain.
Belgium—Australian Embassy, 51/52 Avenue des Arts, Brussels-4.
Britain—Australia House, The Strand, London, W.C.2.
Canada—1155 Dorchester Boulevard West, Montreal 2, P.Q.; 1030 W. Georgia Street, Vancouver 5, B.C.; Australian High Commission, 90 Sparks Street, Ottawa 4, Ontario.
Ceylon—Australian High Commission, 3 Cambridge Place, Colombo 7.
Chile—Australian Embassy, Hotel Carera Hilton, Santiago.
China (Taiwan)—Australian Embassy, 402 Tun Hua South Road, Taipei.
France—Australian Embassy, 26 Rue de la Pepiniere, Paris, 8ᵉ.
Germany, Federal Republic of—Australian Embassy, Kölnerstrasse 157, Bad Godesberg, Bonn; Australian Consulate, Neuer Wall 39, Hamburg 36.
Greece—Australian Embassy, 8 Makedonon Street, Athens.
Hong Kong—Union House, Chater Road, Hong Kong.
Indonesia—C/o Australian Embassy, Djalan Thamrin 15, Djakarta.
Iran—Australian Embassy, 4th Floor Avenue Roosevelt 47, cnr Guity and Kuros Streets, Tehran.
Italy—Australian Embassy, Via Sallustiana 26, Rome; Via Turati 40, Milan.
Japan—Sankaido Building, 9–13 Akasaka 1-Chome, Minato-ku, Tokyo; Asahi Seimi Building, 50, 5-Chome, Koraibashi-suji, Higashi-ku, Osaka.
Kenya—Development House, Government Road, Nairobi.
Lebanon—Australian Embassy, S.F.A.H. Building, Kantari Street, Beirut.
Malaysia—117 Jalan Ampang, Kuala Lumpur.
Malta—Australian High Commission, Dolphin Court, Embassy Way, Ta'xbiex.
The Netherlands—143 Koninginnegracht, The Hague.
New Zealand—A.N.Z. House, 203 Queen Street, Auckland C.1; Bank of New Zealand House, Cathedral Square, Christchurch; Australian High Commission, I.C.I. House, Molesworth Street, Wellington.
Pacific Islands—C/o Department of Trade and Industry, A.N.Z. Bank Building, cnr Pitt and Hunter Streets, Sydney, N.S.W.
Pakistan—Australian High Commission, 9 Kutchery Road, Karachi 4.
Peru—Australian Embassy, Edificio Monterosa, Tercer Piso, Jiron Rufino Torrico 837, Lima.
The Philippines—Australian Embassy, 1414 Roxas Boulevard, Manila.
Singapore—Australian High Commission, 201 Clemenceau Avenue, Singapore 9.
South Africa—St. Mary's Building, 85 Eloff Street, Johannesburg.
Sweden—Australian Embassy, Sergelstorg 12, Stockholm 40.
Switzerland—Australian Consulate-General, 56–58 Rue de Moillebeau, Petit Saconnex 1211, Geneva 19.
Thailand—Australian Embassy, Anglo-Thai Building, 64 Silom Road, Bangkok.
Trinidad—72 South Quay, Port-of-Spain, Trinidad, W.I.
United Arab Republic—Australian Embassy, 1097 Corniche el Nil, Garden City, Cairo.
United States of America—Paramount Building, 1735 Eye Street, N.W. Washington, D.C.; Australian Consulate-General, 636 Fifth Avenue, New York 20, New York; Australian Consulate-General, 350 Post Street, Union Square, San Francisco, California; 3600 Wilshire Boulevard, Los Angeles 5, California.

Australian Trade Correspondents and Marketing Officers

Australian Trade Correspondents and Marketing Officers have no official status but supplement the work of the Trade Commissioner Service. Correspondents are located in Suva, Fiji; Mozambique; Port Louis, Mauritius; Addis Abbaba, Ethiopia; Tel Aviv, Israel; and Istanbul, Turkey. Marketing Officers are located in Rangoon, Burma; Seoul, Korea; Madrid, Spain; Dublin, Ireland; Brussels, Belgium; and Mexico City, Mexico.

Trade Commissioners of overseas governments in Australia

Britain—Senior British Trade Commissioner—Commonwealth Avenue, Canberra. A.C.T.
British Trade Commissioners—20 Bridge Street, Sydney, N.S.W.; 330 Collins Street, Melbourne, Vic.; M.L.C. Building, 243 Edward Street, Brisbane, Qld; F.C.A. Building, Franklin Street, Adelaide, S.A.; 84 St George's Terrace, Perth, W.A.
Office of the Hong Kong Government Trade Representative—Kembla Building, Margaret Street, Sydney, N.S.W.
Office of the Fiji Government Representative—38 Martin Place, Sydney, N.S.W.
Canada—Canadian Trade Commissioners—A.M.P. Building, Circular Quay, Sydney, N.S.W.; 2 City Road, South Melbourne, Vic.
Ceylon—Ceylon Trade Commissioner—66 Pitt Street, Sydney, N.S.W.
China—300 George Street, Sydney, N.S.W.
India—Indian Trade Commissioner—167–187 Kent Street, Sydney, N.S.W.
Malaysia—Malaysian Trade Commissioner—50 Young Street, Sydney, N.S.W.
New Zealand—Senior New Zealand Trade Commissioner—280–288 George Street, Sydney, N.S.W.
New Zealand Government Trade Commissioners—330 Collins Street, Melbourne, Vic.; M.L.C. Building, Adelaide Street, Brisbane, Qld.
Pakistan—4–6 Bligh Street, Sydney, N.S.W.
South Africa—South African Trade Commissioner—622 St Kilda Road, Melbourne, Vic.
Sweden—14th Floor, West Tower, Prince's Gate, Melbourne, Vic.

Commonwealth Migration Offices overseas

The Department of Immigration has established offices overseas to handle migration matters, and in some countries regional offices are provided. Inquiries and applications may also be made at any Australian diplomatic, consular or trade post overseas. Special facilities for migration business are available as follows.

Argentina—Australian Embassy, Calle Rivadavia 1829, Piso 5, Buenos Aires.
Austria—Australian Embassy, Migration Office, Teinfaltstrasse 1, Vienna.
Belgium—Australian Embassy, Migration Office, 51/52 Avenue des Arts, Brussels-4.
Britain—'Canberra House', Migration Office, 10–16 Maltravers Street, The Strand, London, W.C.2.
Ceylon—Australian High Commission, 3 Cambridge Place, Colombo 7, P.O. Box 742.
Denmark—Australian Consulate, Hammerensgade 4, 1267 Copenhagen, K.
Fiji—Australian Commission, C.M.L.A. Building, 3 Central Street, Suva.
Finland—Australian Information Office, Fabianinkatu, 29–31, Helsinki.
France—Australian Embassy, Migration Office, 28 Rue de la Pepiniere, Paris, 8^e.
Germany, Federal Republic of—Australian Embassy. Migration Office, Hohenzollernring 103, Cologne.
Greece—Australian Embassy, Migration Office, 8 Makedonon Street, Athens.
Hong Kong—Australian Government Trade Commission, Migration Office, 9th Floor, Union House, Connaught Road Central, Hong Kong.
India—Office of the Australian Deputy High Commissioner, Mercantile Bank Building, 52 Mahatma Ghandi Road, Bombay; Office of the Australian Deputy High Commissioner, 9 Shakespeare Sarani, Calcutta.
Ireland—Australian Embassy, 33 Fitzwilliam Square, Dublin.
Italy—Australian Embassy, Migration Office, Via Magenta 5, Rome.
Kenya—Australian High Commission, Silopark House, Queensway, Nairobi.
Lebanon—Australian Embassy, Migration Office, 7th Floor, S.F.A.H. Building, Kantari Street, Beirut.
Malta—Australian Migration Office, Australian High Commission, Airways House, Gaiety Lane, cnr High Street, Sliema, Valletta.

The Netherlands—Australian Embassy, Migration Office, Mauritskade 19, The Hague.

Norway—Australian Information Office, Jernbanetorvet 2, Oslo.

Spain—Australian Embassy, Calle de General Sanjurjo 44, Madrid 3.

Sweden—Australian Embassy, Migration Office, Sergelstorg 12, Stockholm 40.

Switzerland—Australian Consulate-General, 56–58 Rue de Moillebeau, Petit Saconnex, 1211, Geneva 19.

Turkey—Australian Embassy, 169 Ataturk Bulvari, Ankara.

United Arab Republic—Australian Embassy, Migration Office, 12 Hassan Sabri Street, Zamalek, Cairo.

United States of America—Australian Consulate-General, International Building, 636 Fifth Avenue, New York 10020, New York.

Australian Consulate-General, Qantas Building, 350 Post Street, Union Square, San Francisco 8, California.

Yugoslavia—Australian Embassy, Migration Office, Bulevar Revolucije 191–193, Belgrade.

CHAPTER 7

POPULATION

Statistics in this chapter cover, in the main, the year 1968. More detailed figures will be found in the annual bulletin *Demography*, and current statistics are published in the *Monthly Review of Business Statistics*, the *Quarterly Summary of Australian Statistics*, and the mimeographed series *Summary of Vital and Population Statistics* and *Overseas Arrivals and Departures*. The final detailed results of the various population censuses are published in a series of printed volumes and parts (*see* list at end of this Year Book, *also* the chapter Miscellaneous—Statistical and other official publications of Australia). Pending publication of the 1966 printed volumes a series of mimeographed bulletins are being issued containing the census results in summary form.

With the proclamation of the *Constitution Alteration* (*Aboriginals*) 1967 on 10 August 1967 the provision of the Constitution in Section 127 requiring the exclusion of Aborigines in reckoning the numbers of the people of the Commonwealth or of a State or other part of the Commonwealth, was repealed. Accordingly, population statistics for all dates subsequent to 10 August 1967 no longer exclude full-blood Aborigines. Estimates for earlier periods back to 30 June 1961 have also been revised to include these Aborigines. However, detailed analyses of the population enumerated in the censuses of June 1961 and 1966 exclude full-blood Aborigines. Particulars of the Aboriginal population are given on page 137 in this chapter.

Types of population statistics

Statistics of the population and its characteristics for Australia or the component States and Territories or other constituent areas at specific dates are divided in three main ways.

(i) *Those ascertained by census enumeration.* The population censuses result in comprehensive statistics of characteristics of the population, such as age, sex, birthplace, etc.

(ii) *Those ascertained by 'population counts'.* From time to time in specific areas there are additional enumerations of the population, which are known as population counts, because normally very little information other than number of persons and their sex is obtained.

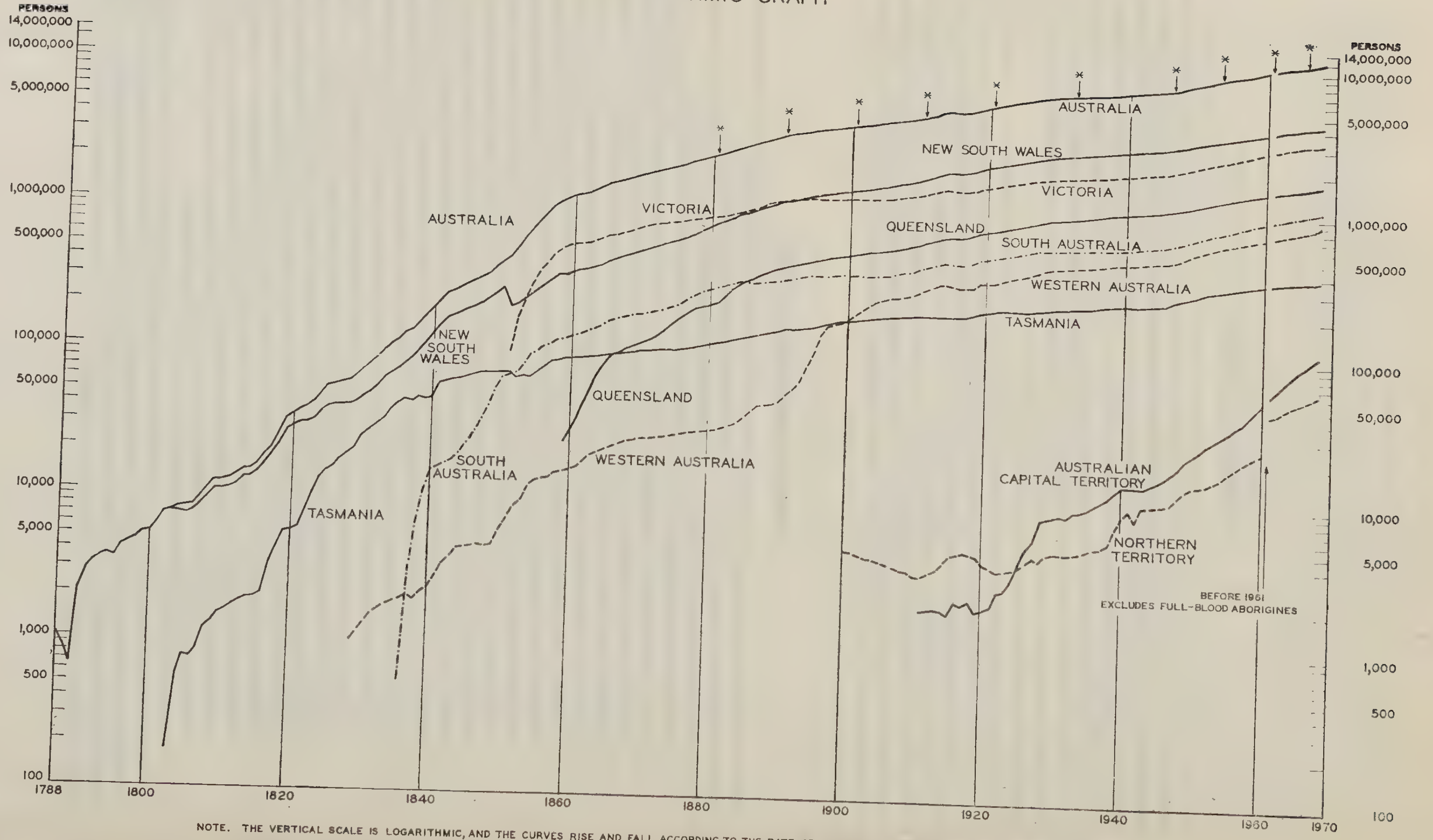
(iii) *Estimates of number and sex.* Estimates for dates subsequent to a census, for Australia as a whole, take account of natural increase and net overseas migration since the last census. Estimates for States and Territories are approximate, since complete records of interstate migration are not available. The population in each State and Territory is estimated by adding to the population ascertained at the census the natural increase and the recorded net gain to Australia from overseas migration for that State or Territory; gains and corresponding losses that result from movements between States and Territories are also taken into account in so far as they are recorded as transfers of residence under child endowment procedures or Commonwealth electoral procedures. These methods are supplemented by results of any special count or sample survey. Holiday, business, or other similar short-term movements between the States and Territories subsequent to the census are not taken into account.

Estimates carried forward in this way eventually reach the point when another census is taken, and the numbers so ascertained supersede those resulting from the estimates. In the light of the census results the estimates for the newly completed intercensal period are revised to adjust for the differences between the new census result and the population at the census date estimated on the basis of the previous census. This is to bring intercensal estimates into line with the two census results and thus effect adjustment for unrecorded or inaccurately recorded movement of population in the intercensal period. Such a revision is made when the preliminary (field count) results of a census become available. Further revision may be necessary when the final results of a census become available.

Final revised estimates become the permanent population estimates. A mean population for twelve month periods is required for certain purposes, and is calculated by the method described on page 128. As populations at specific dates are used in these calculations, consequential revisions are made to mean populations when the estimates for specific dates are revised as described above.

POPULATION OF AUSTRALIA, 1788 TO 1968

LOGARITHMIC GRAPH



NOTE. THE VERTICAL SCALE IS LOGARITHMIC, AND THE CURVES RISE AND FALL ACCORDING TO THE RATE OF INCREASE OR DECREASE; ACTUAL NUMBERS ARE INDICATED BY THE SCALE.

* AUSTRALIAN CENSUS

The method used for estimating State and Territory populations, as described in (iii) *above is different from that used prior to June 1961* (for particulars *see* Year Book No. 52, page 191). Population estimates subsequent to the 1961 Census are based on a method which excludes holiday, business or other similar short-term movements since the census between States and Territories. As a consequence, marked quarterly seasonal movements in some States due to interstate holiday movements are reflected in population figures prior to 1961 but not for subsequent years. This has some effect on the continuity of the series of mean population figures and should be borne in mind when making calculations which use mean populations as a basis (*see* page 128). The following two aspects of seasonal movements, however, are reflected in the estimated populations of the States since 30 June 1961.

(i) People who were on holiday or other short-term travel interstate at the time of the census are counted in the State where they spent census night.

(ii) There is some seasonal movement in the population of Australia as a whole which is due to movements of tourists and other visitors from overseas and of Australians travelling overseas for short periods.

All population statistics shown in this issue of the Year Book for dates up to and including June 1966, and all mean populations for calendar years up to 1965 and financial years up to 1965–66, are final. Population statistics for dates or years subsequent to these will be revised in accordance with the results of the next census.

The population survey

The population survey is the general title given to the household sample survey carried out in February, May, August, and November of each year in all States and Territories. Emphasis in the survey is placed on the collection of data on demographic and work force characteristics, the principal survey component being referred to as the work force survey. The remaining part of the population survey consists of supplementary collections which are carried out from time to time in conjunction with the work force survey. The population survey was instituted in November 1960 in the six State capital cities and was subsequently extended to include non-metropolitan areas. About 37,000 households, representing one per cent of all households, are selected by area sampling methods and enumerated each quarter, the information being obtained by carefully chosen and specially trained interviewers during a four-week period on each occasion. For information about the results of the surveys *see* the chapter Employment and Unemployment.

The census

In Year Book No. 53 a special article was included outlining the history, purposes, legal basis, organisation, and publication of results of the population census in Australia (*see* pages 164 to 170 of that issue), but considerations of space preclude its repetition in this issue.

Early 'musters'

Although regular censuses were not instituted in the several colonies until the years specified in the table below, population returns in one form or another have existed from a very early period in the history of Australia. The earliest enumerations were known as 'musters', and although the actual results of very few of them have been preserved, it is probable that during the early days of colonisation they were of frequent occurrence. The first official 'muster' was taken in 1788 soon after the new settlement at Sydney Cove was formed, and in 1803 the first 'muster' of convicts in Van Dieman's Land (now Tasmania) was conducted.

Development of the census

The first regular census in Australia was taken in New South Wales in November 1828, and included the population of Moreton Bay (now Queensland) but not Van Dieman's Land (Tasmania). Particulars were asked concerning the names, ages and civil conditions of the inhabitants. The next census was taken in 1833, and was followed by another in 1836, when arrangements were made for the enumeration of the population of the newly-established settlement at Port Phillip (Victoria). The first censuses taken in Tasmania, Victoria and Queensland as separate colonies were in 1841, 1854 and 1861 respectively. The first regular census in South Australia was taken in 1844 and in Western Australia in 1848. The 1881 census was the first simultaneous census taken in Australia and formed part of the first simultaneous census of the British Empire.

The following table shows the total population recorded at each census conducted prior to 1891.

POPULATION ENUMERATED(*a*), CENSUSES IN AUSTRALIA, 1828 TO 1886

Date	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1828– November	36,598	..	..	..	..	..	..	..	..
1833– 2 September	60,794	..	..	..	..	..	..	..	..
1836– 2 September	77,096	..	..	..	..	..	..	..	..
1841– 2 March	130,856	..	..	..	..	..	..	..	..
27 September	..	..	..	..	..	50,216	..	..	..
1844–26 February	..	..	..	17,366	..	..	..	..	..
1846–26 February	..	..	..	22,390	..	..	..	..	..
2 March	189,609	..	..	..	..	..	..	..	..
1847–31 December	..	..	..	..	..	70,164	..	..	..
1848–10 October	..	..	..	..	4,622	..	..	..	..
1851– 1 January	..	..	..	63,700	..	..	..	..	..
1 March	268,344	..	..	..	..	70,130	..	..	..
1854–26 April	..	(*b*)234,298	..	..	..	..	..	..	..
30 September	..	..	..	..	11,743	..	..	..	..
1855–31 March	..	..	..	85,821	..	..	..	..	..
1856– 1 March	269,722	..	..	..	..	..	..	..	..
1857–29 March	..	408,998	..	..	..	..	..	..	..
31 March	..	..	..	..	..	81,492	..	..	..
1859–31 December	..	..	..	..	14,837	..	..	..	..
1861– 7 April	350,860	538,628	(*b*)30,059	126,830	..	89,977	..	..	..
1864– 1 January	..	..	61,467	..	..	..	..	..	..
1866–26 March	..	..	..	163,452	..	..	..	..	..
1868– 2 March	..	..	99,901	..	..	..	..	..	..
1870– 7 February	..	..	..	..	..	99,328	..	..	..
31 March	..	..	..	..	24,785	..	..	..	..
1871– 2 April	502,998	730,198	..	185,626	..	..	..	..	..
1 September	..	..	120,104	..	..	..	..	..	..
1876–26 March	..	..	..	213,271	..	..	..	..	..
1 May	..	..	173,283	..	..	..	..	..	..
1881– 3 April	749,825	861,566	213,525	276,414	29,708	115,705	(*c*)3,451	..	2,250,194
1886– 1 May	..	..	322,853	..	..	..	..	..	..

(*a*) Excludes full-blood Aborigines. (*b*) Previously included with New South Wales. (*c*) Included with South Australia for the censuses of 1866, 1871 and 1876. Actually Northern Territory was not transferred to the Commonwealth until 1 January 1911.

Population recorded at censuses

State and Territorial populations recorded at the Australia-wide censuses taken over the period 1881 to 1966 are shown in the following table. The figures relate to the political boundaries of the several States (or Colonies) and Territories as they existed at the date of each census, except that the Northern Territory has been shown separately from South Australia for the censuses prior to its transfer from that State. The years of formation of the separate Colonies and transfer of the Territories are shown in the chapter Discovery, Colonisation and Federation of Australia (page 5).

POPULATION(*a*), BY SEX: AUSTRALIAN CENSUSES, STATES AND TERRITORIES 1881 TO 1966

Census	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.(b)*	*Aust.*
MALES									
3 April 1881	410,211	451,623	125,325	146,183	17,062	61,162	3,347	..	1,214,913
5 April 1891	609,666	598,222	223,779	162,241	29,807	77,560	4,560	..	1,705,835
31 March 1901	710,005	603,720	277,003	180,485	112,875	89,624	4,216	..	1,977,928
3 April 1911	857,698	655,591	329,506	207,358	161,565	97,591	2,734	992	2,313,035
4 April 1921	1,071,501	754,724	398,969	248,267	177,278	107,743	2,821	1,567	2,762,870
30 June 1933	1,318,471	903,244	497,217	290,962	233,937	115,097	3,378	4,805	3,367,111
30 June 1947	1,492,211	1,013,867	567,471	320,031	258,076	129,244	7,378	9,092	3,797,370
30 June 1954	1,720,860	1,231,099	676,252	403,903	330,358	157,129	10,288	16,229	4,546,118
30 June 1961	1,972,909	1,474,395	774,579	490,225	375,452	177,628	16,206	30,858	5,312,252
30 June 1966	2,124,462	1,613,904	843,897	548,530	426,691	187,390	21,508	49,977	5,816,359
FEMALES									
3 April 1881	339,614	409,943	88,200	130.231	12,646	54,543	104	..	1,035,281
5 April 1891	517,471	541,866	169,939	153,292	19,975	69,107	338	..	1,471,988
31 March 1901	644,841	597,350	221,126	177,861	71,249	82,851	595	..	1,795,873
3 April 1911	789,036	659,960	276,307	201,200	120,549	93,620	576	722	2,141,970
4 April 1921	1,028,870	776,556	357,003	246,893	155,454	106,037	1,046	1,005	2,672,864
30 June 1933	1,282,376	917,017	450,317	289,987	204,915	112,502	1,472	4,142	3,262,728
30 June 1947	1,492,627	1,040,834	538,944	326,042	244,404	127,834	3,490	7,813	3,781,988
30 June 1954	1,702,669	1,221,242	642,007	393,191	309,413	151,623	6,181	14,086	4,440,412
30 June 1961	1,944,104	1,455,718	744,249	479,115	361,177	172,712	10,889	27,970	5,195,934
30 June 1966	2,109,360	1,605,622	819,788	543,345	409,982	184,045	15,925	46,036	5,734,103

For footnotes *see* next page.

POPULATION(*a*), BY SEX: AUSTRALIAN CENSUSES, STATES AND TERRITORIES 1881 TO 1966—*continued*

Census	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.(b)*	*Aust.*
PERSONS									
3 April 1881	749,825	861,566	213,525	276,414	29,708	115,705	3,451	..	2,250,194
5 April 1891	1,127,137	1,140,088	393,718	315,533	49,782	146,667	4,898	..	3,177,823
31 March 1901	1,354,846	1,201,070	498,129	358,346	184,124	172,475	4,811	..	3,773,801
3 April 1911	1,646,734	1,315,551	605,813	408,558	282,114	191,211	3,310	1,714	4,455,005
4 April 1921	2,100,371	1,531,280	755,972	495,160	332,732	213,780	3,867	2,572	5,435,734
30 June 1933	2,600,847	1,820,261	947,534	580,949	438,852	227,599	4,850	8,947	6,629,839
30 June 1947	2,984,838	2,054,701	1,106,415	646,073	502,480	257,078	10,868	16,905	7,579,358
30 June 1954	3,423,529	2,452,341	1,318,259	797,094	639,771	308,752	16,469	30,315	8,986,530
30 June 1961	3,917,013	2,930,113	1,518,828	969,340	736,629	350,340	27,095	58,828	10,508,186
30 June 1966	4,233,822	3,219,526	1,663,685	1,091,875	836,673	371,435	37,433	96,013	11,550,462

(*a*) Excludes full-blood Aborigines. (*b*) Part of New South Wales before 1911.

Increase since 1901 census

The increases in the populations of the several States and Territories and of Australia as a whole during the last seven intercensal periods are shown in the following table, which distinguishes the numerical increases, the proportional increases (which do not allow for the differences in the length of the intercensal periods) and the average annual rates of increase.

POPULATION: INTERCENSAL INCREASES(*a*), STATES AND TERRITORIES 1901 TO 1966

State or Territory	*1901–1911 (10 years)*	*1911–1921 (10 years)*	*1921–1933 (12¼ years)*	*1933–1947 (14 years)*	*1947–1954 (7 years)*	*1954–1961 (7 years)*	*1961–1966 (5 years)*
NUMERICAL INCREASE							
New South Wales(*b*)	293,602	453,637	500,476	383,991	438,691	493,484	316,809
Victoria	114,481	215,729	288,981	234,440	397,640	477,772	289,413
Queensland	107,684	150,159	191,562	158,881	211,844	200,569	144,857
South Australia	50,212	86,602	85,789	65,124	151,021	172,246	122,535
Western Australia	97,990	50,618	106,120	63,628	137,291	96,858	100,044
Tasmania	18,736	22,569	13,819	29,479	51,674	41,588	21,095
Northern Territory	−1,501	557	983	6,018	5,601	10,626	10,338
A.C.T.(*c*)	..	858	6,375	7,958	13,410	28,513	37,185
Australia	**681,204**	**980,729**	**1,194,105**	**949,519**	**1,407,172**	**1,521,656**	**1,042,276**
PROPORTIONAL INCREASE—PER CENT							
New South Wales(*b*)	21.67	27.55	23.83	14.76	14.70	14.41	8.09
Victoria	9.53	16.40	18.87	12.88	19.35	19.48	9.88
Queensland	21.62	24.79	25.34	16.77	19.15	15.21	9.54
South Australia	14.01	21.20	17.33	11.21	23.38	21.61	12.64
Western Australia	53.22	17.94	31.89	14.50	27.32	15.14	13.58
Tasmania	10.86	11.80	6.46	12.95	20.10	13.47	6.02
Northern Territory	−31.20	16.83	25.42	124.08	51.54	64.52	38.15
A.C.T.(*c*)	..	50.06	247.86	88.95	79.33	94.06	63.21
Australia	**18.05**	**22.01**	**21.97**	**14.32**	**18.57**	**16.93**	**9.92**
AVERAGE ANNUAL RATE OF INCREASE—PER CENT							
New South Wales(*b*)	1.97	2.46	1.76	0.99	1.98	1.94	1.57
Victoria	0.91	1.53	1.42	0.87	2.56	2.58	1.90
Queensland	1.98	2.24	1.86	1.11	2.53	2.04	1.84
South Australia	1.32	1.94	1.31	0.76	3.05	2.83	2.41
Western Australia	4.36	1.66	2.29	0.97	3.51	2.03	2.58
Tasmania	1.04	1.12	0.51	0.87	2.65	1.82	1.18
Northern Territory	−3.67	1.57	1.87	5.93	6.12	7.37	6.68
A.C.T.(*c*)	..	4.14	10.71	4.65	8.70	9.93	10.29
Australia	**1.67**	**2.01**	**1.63**	**0.96**	**2.46**	**2.26**	**1.91**

(*a*) Excludes full-blood Aborigines. (*b*) Includes Australian Capital Territory before 1911. (*c*) Part of New South Wales before 1911.

Minus sign (—) denotes decrease.

Growth and distribution of population

Growth of population

The table which follows shows the growth in the population of each sex in the various States and Territories as measured by the estimated population at 31 December in 1900 and thereafter at decennial intervals to 1960, and for each year from 1964 to 1968.

ESTIMATED POPULATION(*a*), BY SEX: STATES AND TERRITORIES
DECEMBER, 1900 TO 1968

31 Dec.—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.(b)*	*Aust.*
					MALES				
1900 .	716,047	601,773	274,684	180,349	110,088	89,763	4,288	..	1,976,992
1910 .	858,181	646,482	325,513	206,557	157,971	98,866	2,738	..	2,296,308
1920 .	1,067,945	753,803	396,555	245,300	176,895	107,259	2,911	1,062	2,751,730
1930 .	1,294,419	892,422	481,559	288,618	232,868	113,505	3,599	4,732	3,311,722
1940(*c*) .	1,402,297	947,037	536,712	297,885	248,734	123,650	6,337	7,856	3,570,508
1950 .	1,627,618	1,114,497	620,329	364,705	294,758	147,103	9,414	13,021	4,191,445
1960 .	1,951,907	1,453,815	766,448	483,802	372,665	180,511	14,785	29,140	5,253,073
1964 .	2,078,808	1,573,966	825,775	529,100	417,023	185,051	29,267	43,972	5,682,962
1965 .	2,112,610	1,602,058	841,926	544,257	427,330	186,483	30,632	48,333	5,793,629
1966 .	2,143.521	1,628,672	855,726	554,810	439,680	188,539	31,920	51,846	5,894,714
1967 .	2,180,721	1,655,935	870,770	561,833	454,743	191,446	33,189	55,867	6,004,504
1968 .	2,222,900	1,683,500	887,300	571,000	473,800	194,700	34,800	60,600	6,128,600
					FEMALES				
1900 .	644,258	594,440	219,163	176,901	69,879	83,137	569	..	1,788,347
1910 .	785,674	654,926	273,503	200,311	118,861	94,937	563	..	2,128,775
1920 .	1,023,777	774,106	354,069	245,706	154,428	105,493	1,078	910	2,659,567
1930 .	1,251,934	900,183	435,177	285,849	198,742	111,792	1,365	3,987	3,189,029
1940(*c*) .	1,388,651	967,881	494,740	301,171	225,342	120,352	2,637	6,304	3,507,078
1950 .	1,613,439	1,122,685	585,089	358,138	277,891	143,230	5,006	10,558	4,116,036
1960 .	1,925,354	1,434,475	735,838	473,220	358,368	175,458	10,002	26,132	5,138,847
1964 .	2,063,313	1,563,955	800,750	522,854	401,098	181,457	23,487	40,553	5,597,467
1965 .	2,098,439	1,593,802	817,497	538,701	410,918	183,125	24,832	44,465	5,711,779
1966 .	2,129,786	1,621,198	832,156	549,780	423,005	185,366	26,179	48,203	5,815,673
1967 .	2,166,588	1,647,696	847,496	556,644	438,020	188,182	27,450	52,309	5,924,385
1968 .	2,207,300	1,673,400	864,500	565,400	457,000	191,400	29,100	56,600	6,044,700
					PERSONS				
1900 .	1,360,305	1,196,213	493,847	357,250	179,967	172,900	4,857	..	3,765,339
1910 .	1,643.855	1,301,408	599,016	406,868	276,832	193,803	3,301	..	4,425,083
1920 .	2,091,722	1,527,909	750,624	491,006	331,323	212,752	3,989	1,972	5,411,297
1930 .	2,546,353	1,792,605	916,736	574,467	431,610	225,297	4,964	8,719	6,500,751
1940(*c*) .	2,790,948	1,914,918	1,031,452	599,056	474,076	244,002	8,974	14,160	7,077,586
1950 .	3,241,057	2,237,182	1,205,418	722,843	572,649	290,333	14,420	23,579	8,307,481
1960 .	3,877,261	2,888,290	1,502,286	957,022	731,033	355,969	24,787	55,272	10,391,920
1964 .	4,142,121	3,137,921	1,626,525	1,051,954	818,121	366,508	52,754	84,525	11,280,429
1965 .	4,211,049	3,195,860	1,659,423	1,082,958	838,248	369,608	55,464	92,798	11,505,408
1966 .	4,273,307	3,249,870	1,687,882	1,104,590	862,685	373,905	58,099	100,049	11,710,387
1967 .	4,347,309	3,303.631	1,718,266	1,118,477	892,763	379,628	60,639	108,176	11,928,889
1968 .	4,430,200	3,356,900	1,751,800	1,136,400	930,800	386,000	64,000	117,200	12,173,300

(*a*) Excludes full-blood Aborigines before 1961. The results of the census of 30 June 1966 have been taken into account in the preparation of estimates for dates after the census of 30 June 1961. *See* text, page 117. (*b*) Part of New South Wales before 1911. (*c*) Includes all defence personnel enlisted in Australia irrespective of movement after enlistment.

The estimated population at 31 December each year from 1788 to 1946 is shown in *Demography*, Bulletin No. 67, 1949, and for the period 1901 to 1967 in *Demography*, Bulletin No. 85, 1967. A graph illustrating the growth of the population of Australia and of each State and Territory appears on plate 16, page 118.

Proportions of area and of population, density and masculinity

In the following table the proportions of the total area and of the total population represented by each State and Territory are given, together with the density and the masculinity of the population. Additional information regarding density and masculinity of population appears later in this chapter

PROPORTIONS OF AREA AND OF POPULATION; DENSITY AND MASCULINITY OF POPULATION: STATES AND TERRITORIES, 31 DECEMBER 1968

State or Territory	*Proportion of total area per cent*	*Proportion of population, 31 Dec. 1968 (per cent)*			*Density(a)*	*Masculinity(b)*
		Males	*Females*	*Persons*		
New South Wales . . .	10.43	36.27	36.52	36.39	14.32	100.71
Victoria	2.96	27.47	27.68	27.58	38.20	100.60
Queensland	22.47	14.48	14.30	14.39	2.63	102.63
South Australia	12.81	9.32	9.35	9.34	2.99	100.99
Western Australia . . .	32.88	7.73	7.56	7.65	0.95	103.67
Tasmania	0.89	3.18	3.17	3.17	14.63	101.72
Northern Territory . . .	17.53	0.57	0.48	0.53	0.12	119.45
Australian Capital Territory . .	0.03	0.99	0.94	0.96	124.84	107.16
Australia	**100.00**	**100.00**	**100.00**	**100.00**	**4.10**	**101.39**

(*a*) Number of persons per square mile. (*b*) Number of males per 100 females.

Urban and rural distribution

In censuses before 1966 *metropolitan and other urban* boundaries were delineated without common criteria, but for the 1966 census a new uniform concept of *urban*, based on a minimum population density of 500 persons per square mile, was introduced. Other new criteria concerned land use, continuity of dwellings, enclaves, and unoccupied dwellings in holiday areas. No account was taken of administrative boundaries in delineating these urban centres.

Because of practical difficulties (notably lack of time to carry out an extensive examination of each area in order to re-design suitable collector's districts and the absence of suitable topographic boundaries around small towns) the new criteria were for the time being uniformly applied only to urban centres within the capital city statistical divisions and the statistical districts (*see* below), to other urban centres with a population of 30,000 or more, and to a few smaller centres (Katoomba-Wentworth Falls, Lawson-Hazelbrook, and urban centres in the Shires of Wyong and Gosford in New South Wales, Moe-Yallourn in Victoria, Cairns in Queensland, and Kalgoorlie in Western Australia). It is proposed to extend the application of the new criteria to smaller centres in future censuses.

Briefly the new criteria are as follows.

(1) Population clusters of 1,000 or more persons having a minimum density of 500 persons per square mile shall be designated '*urban*'. This density shall be determined for each census collector's district (the smallest geographical area available). Additionally, some areas of lower population and or density shall be classified as '*urban*' on other grounds (e.g. holiday areas, industrial areas).

(2) Around each principal urban centre with a population of 75,000 or more *two* boundaries shall be drawn. The *outer* boundary shall circumscribe the area which is expected to be in close economic and social contact with the principal urban centre for the next two or three decades. These areas shall be designated STATISTICAL DIVISIONS (for State capital cities) or STATISTICAL DISTRICTS (for Canberra, Newcastle, Wollongong, and Geelong). The *inner* boundary shall delimit the principal urban centre itself. It shall be a *moving* boundary, which from census to census, as urbanisation proceeds, will move outwards to encompass peripheral development. For capital cities the principal urban centre encompassed by the inner boundary shall be designated the METROPOLITAN AREA.

(3) Other urban centres shall be described by name as URBAN.

For urban centres *not* yet delimited by the new criteria, this procedure was used: urban centres were intensively examined on the most recent aerial photographs available and the boundaries set as closely as possible to the periphery of the built-up area without regard to local government boundaries. The greater availability of recent aerial photographs in 1966 than in 1961 enabled more meaningful boundaries to be delineated for many small urban centres.

Census field count statement No. 4, *Population, Principal Urban Centres of Australia* contains an appendix in which are expounded the full criteria now being applied.

Rural population comprises the inhabitants of the remaining portions of each State or Territory. The term *migratory* used in the following tables refers to persons not elsewhere enumerated who at midnight on 30 June 1966 were on ships in Australian waters or were travelling on long-distance trains, motor coaches or aircraft.

URBAN AND RURAL POPULATIONS(a): STATES AND TERRITORIES CENSUS, 30 JUNE 1966

Division	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
				PERSONS					
Urban—									
Metropolitan	2,446,345	2,110,168	718,822	727,916	499,969	119,469	..	92,308	6,714,997
Other	1,211,472	643,598	558,115	173,796	140,267	141,512	28,753	..	2,897,513
Rural	566,946	462,772	384,689	188,590	193,399	109,779	8,385	3,705	1,918,265
Migratory	9,059	2,988	2,059	1,573	3,038	675	295	..	19,687
Total	**4,233,822**	**3,219,526**	**1,663,685**	**1,091,875**	**836,673**	**371,435**	**37,433**	**96,013**	**11,550,462**
				PERCENTAGES					
Urban—									
Metropolitan	57.78	65.54	43.21	66.67	59.76	32.16	..	96.14	58.14
Other	28.62	19.99	33.55	15.92	16.76	38.10	76.81	..	25.08
Rural	13.39	14.37	23.12	17.27	23.12	29.56	22.40	3.86	16.61
Migratory	0.21	0.09	0.12	0.14	0.36	0.18	0.79	..	0.17
Total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

(a) Excludes full-blood Aborigines. *See* explanation of urban, rural, etc. preceding this table.

Classification of urban centres by size

The following table classifies the urban centres in Australia into grades of size of population at the censuses of 30 June 1961 and 1966. Corresponding detail for each State and Territory at the 1966 census is included in the previous issue of the Year Book.

A table showing the aggregate urban population at the 1961 census of all cities and towns outside the metropolitan area of each State with 2,000 or more and 3,000 or more urban inhabitants was included in Year Book No. 51, page 267. A table showing similar data for the 1954 census was included in Year Book No. 47, page 295 and one for the 1947 census in Year Book No. 40, page 334. Comparisons between these various tables can be made only if allowance is made for changes in the status and structure of local government areas and for changes in the manner of determining urban population at each census.

URBAN CENTRES: NUMBER AND POPULATION(a), BY SIZE, AUSTRALIA CENSUSES, 1961 AND 1966

	Census, 30 June 1961			*Census, 30 June 1966*		
Population size	*No. of urban centres*	*Population*	*Percentage of Australian population*	*No. of urban centres*	*Population*	*Percentage of Australian population*
500,000 and over	4	5,223,639	49.71	4	6,003,251	51.97
100,000–499,999	4	882,140	8.39	5	1,120,586	9.70
75,000– 99,999	1	87,922	0.84	1	92,308	0.80
50,000– 74,999	3	165,792	1.58	5	278,836	2.41
25,000– 49,999	12	374,214	3.56	7	230,177	1.99
20,000– 24,999	7	151,590	1.44	9	198,562	1.72
15,000– 19,999	11	187,926	1.79	16	269,979	2.34
10,000– 14,999	21	263,113	2.50	20	240,091	2.08
5,000– 9,999	66	458,491	4.36	61	442,750	3.83
2,500– 4,999	97	324,315	3.09	103	354,795	3.07
2,000– 2,499	51	113,734	1.08	49	108,519	0.94
1,000– 1,999	172	247,999	2.36	178	252,825	2.19
Less than 1,000(b)	30	20,158	0.19	28	19,831	0.17
500,000 and over	4	5,223,639	49.71	4	6,003,251	51.97
100,000 „ „	8	6,105,779	58.10	9	7,123,837	61.68
75,000 „ „	9	6,193,701	58.94	10	7,216,145	62.47
50,000 „ „	12	6,359,493	60.52	15	7,494,981	64.89
25,000 „ „	24	6,733,707	64.08	22	7,725,158	66.88
20,000 „ „	31	6,885,297	65.52	31	7,923,720	68.60
15,000 „ „	42	7,073,223	67.31	47	8,193,699	70.94
10,000 „ „	63	7,336,336	69.82	67	8,433,790	73.02
5,000 „ „	129	7,794,827	74.18	128	8,876,540	76.85
2,500 „ „	226	8,119,142	77.26	231	9,231,335	79.92
2,000 „ „	277	8,232,876	78.35	280	9,339,854	80.86
1,000 „ „	449	8,480,875	80.71	458	9,592,679	83.05
Total urban population	**479**	**8,501,033**	**80.90**	**486**	**9,612,510**	**83.22**

(a) Excludes full-blood Aborigines. (b) Urban centres so classified on grounds other than population and density.

Principal cities and towns, Australia

The following table shows the population of the principal cities and towns with a population of 10,000 or more (except Alice Springs, Northern Territory) in each State and Territory of Australia at 30 June 1966 (census) and 30 June 1968.

Unless otherwise indicated as 'urban centre', 'statistical division' or 'statistical district', the population figures shown in the table relate to areas delimited for local government or other administrative purposes. The figures shown for the several urban centres (or metropolitan areas) and statistical divisions (or districts) are in accordance with the new concepts adopted at the 1966 census for the delimitation of metropolitan and other urban areas for statistical purposes. These concepts are described on page 123. Statistical division and statistical district boundaries are expected to remain unchanged for a substantial number of years, whereas the boundaries of metropolitan areas and urban centres will, by definition, change at intervals. The present boundaries of these urban centres (or metropolitan areas) are those established from 1966 census data; it has not been possible to make post-censal estimates for all these urban centres.

POPULATION OF PRINCIPAL CITIES AND TOWNS: STATES AND TERRITORIES 30 JUNE 1966 (CENSUS) AND 1968

	Population at 30 June—	
City or town	*1966(a)*	*1968*
NEW SOUTH WALES—		
Sydney—		
Sydney City	159,531	155,480
Metropolitan Area	2,447,219	n.a.
Statistical Division(*b*)	2,542,207	2,646,800
Newcastle—		
Newcastle City	143,070	144,450
Urban Centre	234,005	n.a.
Statistical District(*c*)	327,578	338,920
Wollongong—		
Greater Wollongong	149,523	155,160
Urban Centre	162,171	n.a.
Statistical District(*d*)	177,456	187,910
Greater Cessnock	34,521	34,500
Blue Mountains	30,733	32,110
Broken Hill	30,043	30,320
Wagga Wagga	25,820	27,180
Albury	25,112	26,210
Tamworth	21,683	22,480
Orange	20,996	21,970
Goulburn	20,871	21,090
Lismore	19,757	20,040
Bathurst	17,230	17,330
Woy Woy–Umina (urban centre)	16,289	n.a.
Grafton	15,987	16,150
Dubbo	15,589	15,970
Armidale	15,010	15,890
Lithgow	12,811	12,710
Gosford (urban centre)	11,310	n.a.
Taree	10,563	10,910
VICTORIA—		
Melbourne—		
Melbourne City	76,006	76,200
Metropolitan Area	2,110,336	n.a.
Statistical Division	2,230,793	2,319,700
Geelong—		
Geelong City	18,129	18,190
Urban Centre	105,060	n.a.
Statistical District	111,365	115,500
Ballarat—		
Ballaarat City	41,661	41,910
Urban Centre	56,312	n.a.
Bendigo—		
Bendigo City	30,806	31,350
Urban Centre	42,209	n.a.
Moe—		
Moe City	16,555	16,690
Moe–Yallourn (urban centre)	23,222	n.a.
Shepparton	17,488	18,250
Warrnambool	17,500	17,980
Morwell (urban centre)	16,647	n.a.
Wangaratta	15,181	15,640
Traralgon	14,080	14,420
Mildura	12,934	13,120
Horsham	10,562	10,900
Hamilton	10,062	10,160

POPULATION OF PRINCIPAL CITIES AND TOWNS: STATES AND TERRITORIES 30 JUNE 1966 (CENSUS) AND 1968—*continued*

City or town	*Population at 30 June—* 1966(a)	*Population at 30 June—* 1968
QUEENSLAND—		
Brisbane—		
Brisbane City	656,612	680,000
Metropolitan Area	719,278	n.a.
Statistical Division	778,193	813,300
Townsville	59,135	63,300
Toowoomba	55,813	58,000
Gold Coast	49,495	56,500
Rockhampton	46,246	47,000
Cairns	26,891	27,400
Bundaberg	25,472	26,500
Mackay—		
Mackay City	18,651	19,100
Urban Centre	24,603	n.a.
Maryborough	19,662	19,850
Mount Isa (urban centre)	16,952	n.a.
Gladstone	12,435	12,400
Gympie	11,286	11,350
Warwick	10,075	10,150
SOUTH AUSTRALIA—		
Adelaide—		
Adelaide City	18,619	17,100
Metropolitan Area	728,279	742,300
Statistical Division	771,561	794,300
Whyalla	22,131	26,900
Mount Gambier	17,261	17,350
Port Pirie	13,965	13,900
Port Augusta	10,132	10,650
WESTERN AUSTRALIA—		
Perth—		
Perth City	96,322	96,800
Metropolitan Area	500,246	n.a.
Statistical Division	559,298	606,000
WESTERN AUSTRALIA—*continued*		
Kalgoorlie—		
Kalgoorlie Town	9,203	9,400
Kalgoorlie–Boulder (urban centre)	19,980	n.a.
Bunbury	15,467	16,450
Geraldton	12,196	13,500
Albany	11,440	12,050
TASMANIA—		
Hobart—		
Hobart City	53,257	52,810
Metropolitan Area	119,469	123,500
Statistical Division	141,311	144,850
Launceston—		
Launceston City	37,217	36,880
Urban Centre	60,456	61,870
Burnie–Somerset (urban centre)	18,042	19,050
Devonport (urban centre)	14,874	15,910
NORTHERN TERRITORY—		
Darwin—		
Darwin City	18,695	21,617
Urban Centre	21,205	n.a.
Alice Springs	6,390	7,810
AUSTRALIAN CAPITAL TERRITORY—		
Canberra—		
Canberra City District	93,314	110,020
Metropolitan Area	92,311	n.a.
Statistical District(e)	107,138	124,490

(a) Population at Census date. The difference between the statistics published here and those shown in census publications, which exclude full-blood Aborigines, cannot be taken as reliable statistics of Aboriginal population. (b) Includes part (15,290 at 1968) of Blue Mountains. (c) Includes Maitland (29,350 at 1968) and most (33,820 at 1968) of Greater Cessnock. (d) Includes Shellharbour (26,600 at 1968). (e) Includes Queanbeyan (13,330 at 1968) in New South Wales.

Principal cities of the world

The following table shows the population of the world's largest cities at the latest available date. Since the way in which cities are delimited differs from country to country, the table shows data for the urban agglomeration, where available, as well as data for the so-called city proper. The urban agglomeration is defined in the United Nations *Demographic Yearbook* 1967 (page 24), from which most of the figures in the table have been taken, as including the suburban fringe or thickly settled territory lying outside of, but adjacent to, the city boundaries. (*See also* the Technical Notes on Statistical Tables and footnotes to the table in the *Demographic Yearbook.*)

POPULATION OF THE WORLD'S LARGEST CITIES

			Population ('000)	
City	*Country*	*Year*	*City proper*	*Urban agglomeration*
New York	U.S.A.	1966	(a)7,969	(a)(b)11,410
Tokyo	Japan	1966	8,907	11,005
London	England	1967	..	7,881
Paris	France	1962	2,790	7,369
Buenos Aires	Argentina	1960	2,967	7,000
Shanghai	China	1957	6,900	..
Los Angeles	U.S.A.	1966	..	(a)(b)6,789
Chicago	U.S.A.	1966	..	(a)(b)6,732
Moscow	U.S.S.R.	1967	6,422	6,507
Sao Paulo	Brazil	1967	..	5,383
Bombay	India	1967	4,903	..
Calcutta	India	1967	3,072	4,765
Philadelphia	U.S.A.	1966	(a)2,036	(a)(b)4,690
Cairo	United Arab Republic	1966	4,220	..
Detroit	U.S.A.	1966	..	(a)(b)4,060
Rio de Janeiro	Brazil	1967	..	4,031
Peking	China	1957	4,010	..
Seoul	Korea	1966	(b)3,795	..
Leningrad	U.S.S.R.	1967	3,296	3,706
Mexico City	Mexico	1967	3,353	..
Tientsin	China	1957	3,220	..
Boston	U.S.A.	1966	..	(a)(b)3,201
Osaka	Japan	1966	..	3,133
San Francisco	U.S.A.	1966	(a)714	(a)(b)2,958
Djakarta	Indonesia	1961	2,907	..
Delhi	India	1967	2,511	2,874
Karachi	Pakistan	1967	..	2,721
Teheran	Iran	1966	2,695	..
Sydney	Australia	1968	..	(c)2,647
Washington	U.S.A.	1966	(a)806	(a)(b)2,615
Madrid	Spain	1965	..	2,599
Rome	Italy	1965	..	2,485
Manchester	England	1966	625	2,453
Birmingham	England	1966	1,103	2,437
Montreal	Canada	1966	1,222	2,437
Shenyang(e)	China	1957	2,411	..
Pittsburgh	U.S.A.	1966	..	(a)(b)2,376
Melbourne	Australia	1968	..	(c)2,320
Santiago	Chile	1966	..	2,314
St Louis	U.S.A.	1966	(a)698	(a)(b)2,284
West Berlin(f)	Germany	1966	2,191	..
Toronto	Canada	1966	665	2,158
Wuhan	China	1957	2,146	..
Chungking	China	1957	2,121	..
Bogota	Colombia	1967	2,066	..
Istanbul	Turkey	1965	1,751	2,052
Cleveland	U.S.A.	1966	(d)811	(a)(b)2,004
Baltimore	U.S.A.	1966	(a)934	(a)(b)1,980
Budapest	Hungary	1966	1,960	..
Singapore	Singapore	1967	1,956	..
Nagoya	Japan	1966	..	1,954
Madras	India	1967	1,927	..
Newark	U.S.A.	1966	..	(a)(b)1,862
Athens	Greece	1961	628	1,853

(*a*) Provisional. (*b*) 'Standard metropolitan statistical area'; *see U.N. Demographic Year Book* for exact areas included. (*c*) Statistical Division. (*d*) 1965. (*e*) Formerly Mukden. (*f*) East Berlin, 1965, population of city proper, 1,073,647.

Mean population

Mean populations are calculated for twelve-month periods to provide a satisfactory average basis for calculations requiring allowance for the continuous change in population figures during such periods. From 1901 onwards the mean population for any year has been calculated by the formula:

$$\text{Mean population} = \frac{a + 4b + 2c + 4d + e}{12}$$

where *a*, *b*, *c*, *d*, and *e*, respectively, are the populations at the end of the quarter immediately preceding the year and at the end of each of the four succeeding quarters; e.g. in the case of a calendar year, 31 December of the preceding year, and 31 March, 30 June, 30 September and 31 December of the year under consideration. This formula gives a close approximation to the mean of a theoretical population progressing smoothly through the five values *a*, *b*, *c*, *d*, and *e*.

The following tables show the mean populations for the calendar and financial years 1959 to 1968.

MEAN POPULATION(*a*):.CALENDAR YEARS, STATES AND TERRITORIES 1959 TO 1968

Year ended 31 Dec.—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1959 . .	3,762,339	2,783,951	1,464,469	921,106	711,737	341,423	23,623	46,618	10,055,266
1960 . .	3,834,085	2,857,032	1,491,114	944,861	722,900	346,913	25,107	52,562	10,274,574
1961 . .	3,913,967	2,926,075	1,516,334	970,118	737,596	353,628	26,272	58,852	10,502,842
1962 . .	3,986,796	2,983,715	1,551,249	987,867	766,205	355,682	46,034	66,180	10,743,728
1963 . .	4,050,230	3,041,442	1,578,309	1,010,500	788,457	360,590	48,330	73,300	10,951,158
1964 . .	4,109,559	3,105,685	1,610,809	1,037,495	808,300	364,554	51,528	80,499	11,168,429
1965 . .	4,176,686	3,165,594	1,644,028	1,066,884	826,481	367,970	54,142	88,417	11,390,202
1966 . .	4,240,306	3,221,409	1,674,357	1,094,567	848,837	371,632	56,672	96,502	11,604,282
1967 . .	4,309,068	3,277,224	1,702,689	1,111,675	876,997	376,588	59.447	103,725	11,817,413
1968 . .	4,387,400	3,328,500	1,733,900	1,126,200	910,100	382,300	62,500	112,800	12,043,600

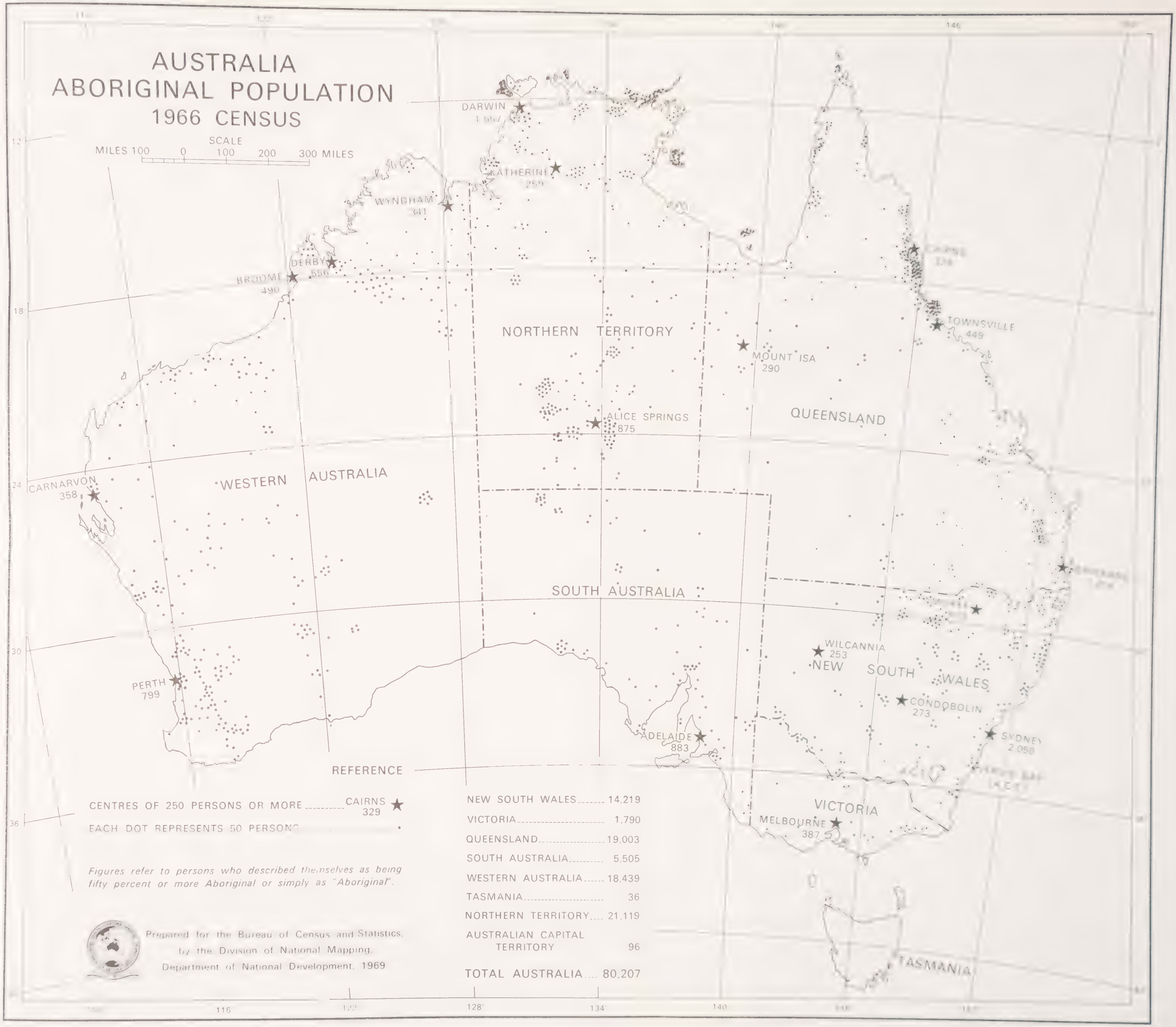
MEAN POPULATION(*a*): FINANCIAL YEARS, STATES AND TERRITORIES 1958-59 TO 1967-68

Year ended 30 June—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1959 . .	3,729,030	2,749,994	1,450,535	908,354	705,869	338,628	22,507	43,429	9,948,346
1960 . .	3,796,452	2,819,650	1,478,129	933,619	717,316	344,111	24,573	50,013	10,163,863
1961 . .	3,875,921	2,893,417	1,503,703	957,136	729,770	350,077	25,673	55,232	10,390,929
1962 . .	3,952,259	2,956,769	1,539,634	979,241	755,770	353,175	45,282	62,674	10,644,804
1963 . .	4,020,774	3,011,833	1,563,347	998,510	777,413	358,180	46,960	69,557	10,846,574
1964 . .	4,078,917	3,073,384	1,594,993	1,023,448	798,824	362,758	50,010	76,966	11,059,300
1965 . .	4,142,568	3,136,319	1,626,935	1,052,098	817,157	366,366	52,793	84,400	11,278,636
1966 . .	4,209,710	3,194,035	1,660,076	1,081,864	837,290	369,600	55,418	92,624	11,500,617
1967 . .	4,272,703	3,249,913	1,688,078	1,103,973	862,130	373,916	58,081	99,925	11,708,719
1968 . .	4,347,217	3,302,393	1,717,839	1,118,226	892,537	379,367	60,875	108,175	11,926,629

(*a*) Excludes full-blood Aborigines for years before 1962 (and 1961–62). Population estimates after the 1961 census are based on a method which omits holiday, business or other short-term movements between States and Territories. As a consequence, marked quarterly seasonal movements in some States due to interstate holiday movements are reflected in the mean population figures for the States before 1962 (and 1961–62), but not in those for 1962 (1961-62) and subsequent years.

Elements of increase

The two factors which contribute to the growth of a population are 'natural increase', i.e. the excess of births over deaths, and 'net migration', i.e. the excess of arrivals over departures. The 'total increase' of the population is obtained by combining natural increase with the increase by net migration. However, comparison of the total increase so obtained with that derived by subtracting the population recorded at one census from that recorded at the next census reveals differences which can be attributed partly to differences in the coverage of the census enumerations, and partly to deficiencies in the records of the elements of increase.


SCALE
MILES 100 0 100 200 300 MILES
DARWIN
1,557
KATHERINE
259
WYNDHAM
341
DERBY
556
BROOME
490
CARNARVON
358
PERTH
799
NORTHERN TERRITORY
ALICE SPRINGS
875
WESTERN AUSTRALIA
SOUTH AUSTRALIA
ADELAIDE
883
MOUNT ISA
290
QUEENSLAND
CAIRNS
TOWNSVILLE
449
WILCANNIA
253
NEW SOUTH WALES
CONDOBOLIN
273
SYDNEY
2,050
A.C.T.
VICTORIA
MELBOURNE
387
TASMANIA
12
18
24
30
36
116
122
128°
134°
140
146

AUSTRALIA ABORIGINAL POPULATION 1966 CENSUS

REFERENCE

CENTRES OF 250 PERSONS OR MORE ---------- CAIRNS 329 ★

EACH DOT REPRESENTS 50 PERSONS ---------- •

Figures refer to persons who described themselves as being fifty percent or more Aboriginal or simply as "Aboriginal".

NEW SOUTH WALES	14,219
VICTORIA	1,790
QUEENSLAND	19,003
SOUTH AUSTRALIA	5,505
WESTERN AUSTRALIA	18,439
TASMANIA	36
NORTHERN TERRITORY	21,119
AUSTRALIAN CAPITAL TERRITORY	96
TOTAL AUSTRALIA	80,207

Prepared for the Bureau of Census and Statistics,
by the Division of National Mapping,
Department of National Development, 1969

PLATE 17

Elements of increase, 1941 to 1968

In the following table particulars are given of the elements of increase for each five-year period from 1941 to 1965 and for each of the years 1964 to 1968.

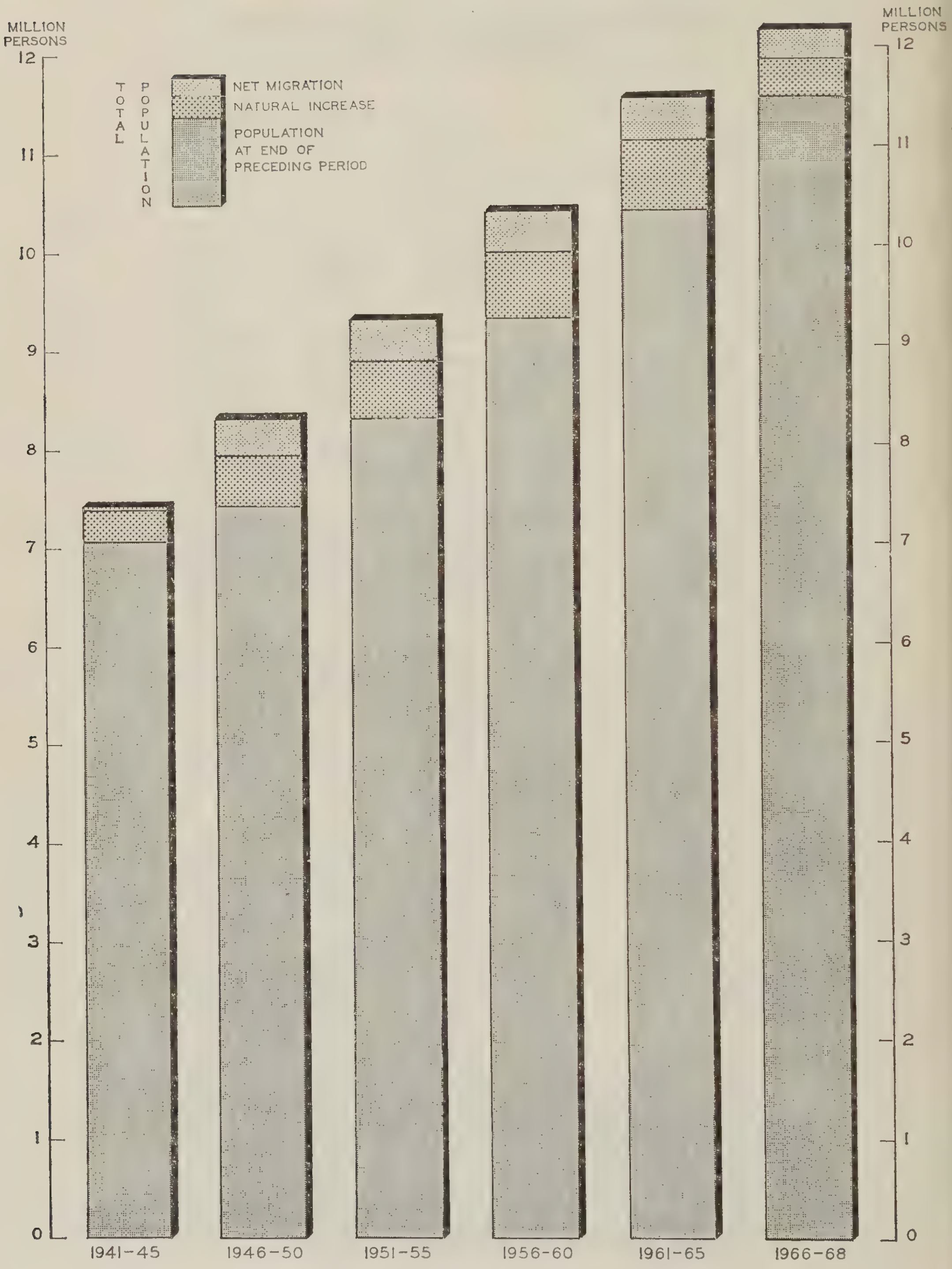
POPULATION(*a*): ELEMENTS OF INCREASE, BY SEX AUSTRALIA, 1941 TO 1968

Period	*Natural increase* (*b*)(*c*)	*Net overseas migration gain* (*d*)	*Increase in total population* (*a*)(*e*)
	MALES		
1941–45	142,605	5,325	151,358
1946–50	255,335	217,728	469,579
1951–55	287,685	240,481	522,372
1956–60	328,616	214,210	539,256
1961–65	331,032	200,463	(*a*)519,623
1964	61,816	52,058	111,349
1965	58,696	54,511	110,667
1966	56,735	44,906	101,085
1967	60,172	49,618	109,790
1968	62,563	61,484	124,000
	FEMALES		
1941–45	195,073	2,484	201,253
1946–50	274,112	135,356	407,705
1951–55	312,017	173,343	481,972
1956–60	351,241	190,812	540,839
1961–65	356,400	199,425	(*a*)553,784
1964	66,739	47,284	113,598
1965	64,443	50,345	114,312
1966	61,962	42,020	103,894
1967	66,421	42,291	108,712
1968	68,794	51,569	120,400
	PERSONS		
1941–45	337,678	7,809	352,611
1946–50	529,447	353,084	877,284
1951–55	599,702	413,824	1,004,344
1956–60	679,857	405,022	1,080,095
1961–65	687,432	399,888	(*a*)1,073,407
1964	128,555	99,342	224,947
1965	123,139	104,856	224,979
1966	118,697	86,926	204,979
1967	126,593	91,909	218,502
1968	131,357	113,053	244,400

(*a*) Excludes full-blood Aborigines before 30 June 1961. (*b*) Excess of births registered over deaths registered. From September 1939 to June 1947, deaths of defence personnel whether overseas or in Australia are included. (*c*) Excludes full-blood Aborigines before 1 January 1967. (*d*) Excess of recorded overseas arrivals over recorded overseas departures. Excludes troop movements for the period September 1939 to June 1947. (*e*) Increase in total population as recorded at censuses or as estimated for intercensal periods. It includes, in addition to the recorded figures for natural increase and net overseas migration gain, adjustments to make the series of increases agree with total intercensal increases revealed by successive censuses (up to the Census of 30 June 1966), and adjustments for exclusion of Aboriginal births and deaths between 30 June 1961 and January 1967.

POPULATION: ELEMENTS OF INCREASE, AUSTRALIA

1941 TO 1968



FOR EXPLANATORY NOTES SEE PAGE 128

PLATE 18

Rate of population growth

In the following two tables natural increase refers to the excess of births over deaths (including deaths of Australian defence personnel), net migration refers to excess of overseas arrivals over departures excluding overseas movement of defence personnel for the period September 1939 to June 1947, and total increase is the sum of natural increase and net migration together with adjustments to make the series of increases agree with total intercensal increases revealed by successive census results (up to the census of 30 June 1966).

Annual rates of natural increase, net migration and total increase, for single years, represent the increase during the year expressed as a proportion (per cent) of the population at the beginning of the year. These rates are slightly higher than those calculated as a proportion (per cent) of the mean population for the year.

Average annual rates of increase for periods greater than one year have been calculated in the following manner.

The average annual rate of total increase is computed by the formula:

$$P_t = P_0 (1 + r)^t$$

where P_0 and P_t are the populations at the beginning and end respectively of a t-year period and r is the average annual rate of growth.

The average annual rate of natural increase and net migration is computed by dividing the average annual rate of total increase between its components in proportion to the fraction of total increase due to each component during the period. Differences between the sum of the rates of natural increase and of net migration and the rate of total increase are due to the intercensal adjustment.

POPULATION(*a*): ANNUAL RATE OF GROWTH, AUSTRALIA
1941 TO 1968
(Per cent)

Period	*Natural increase*(*b*)	*Net migration*	*Total increase*(*c*)
Average annual rate—			
1941–45	0.94	0.02	0.98
1946–50	1.36	0.91	2.26
1951–55	1.38	0.95	2.31
1956–60	1.40	0.83	2.22
1961–65	1.27	0.74	(*c*) 1.98
Annual rate—			
1964	1.16	0.90	2.03
1965	1.09	0.93	1.99
1966	1.03	0.75	1.78
1967	(*b*) 1.08	0.79	1.87
1968	1.10	0.95	2.05

(*a*) Population on which rates calculated excludes full-blood Aborigines before 30 June 1961. (*b*) Excludes particulars of full-blood Aborigines before 1 January 1967. (*c*) Excludes full-blood Aborigines before 30 June 1961.

The average annual rate of population growth during the present century has been 1.73 per cent, but the results from year to year have deviated widely from this figure. In the following table the period 1 January 1901 to 31 December 1968 has been arranged into certain defined groups of years according to the occurrence of influences markedly affecting the growth of population.

POPULATION(*a*): PERIODIC RATES OF GROWTH, AUSTRALIA
1901 TO 1968

Period	Interval (years)	Total increase ('000)	Average annual numerical increase ('000)	Average annual rate of population growth (per cent)		
				Natural increase	Net migration	Total
1901 to 1913 . .	13	1,128	87	1.55	0.49	2.04
1914 to 1923 . .	10	862	86	1.49	0.15	1.64
1924 to 1929 . .	6	680	113	1.26	0.62	1.88
1930 to 1939 . .	10	569	57	0.82	0.02	0.85
1940 to 1946 . .	7	513	73	0.98	0.01	1.01
1947 to 1952 . .	6	1,222	204	1.37	1.19	2.54
1953 to 1961 . .	9	1,862	207	1.40	0.79	2.17
1962 to 1968 . .	7	1,531	219	(*b*)1.15	0.79	1.94

(*a*) Excludes full-blood Aborigines before 1962. (*b*) Excludes full-blood Aborigines before 1 January 1967.

Rates of population growth from 1901 are shown for each State and Territory of Australia in the annual bulletin, *Demography*. Estimated rates of growth of the population of Australia in comparison with those for other countries of the world for the years 1963–1967 are shown in the table on pages 160–1.

Density

From certain aspects, population may be less significant in respect of its absolute amount than in its relation to the area of the country. Australia, with an area of 2,967,909 square miles and a population in December 1968 of 12,173,300, has a density of only 4.10 persons to the square mile, and is, therefore, one of the most sparsely populated countries of the world. For other continents and subcontinents, the densities in 1967 were approximately as follows: Europe (excluding U.S.S.R.), 238; Asia (excluding U.S.S.R.), 179; Latin America, 34; U.S.S.R., 28; Africa, 28, and Northern America, 26. The population density of Australia in 1967 was 4.02, about one-sixth of that of Northern America; about one-seventh of that of Africa and of the U.S.S.R.; about one-eighth of that of Latin America; about one-forty-fifth of that of Asia (excluding U.S.S.R.), and about one-sixtieth of that of Europe (excluding U.S.S.R.).

Because of the large area of Australia and the unsuitability for settlement of much of the country, the density of population must necessarily increase slowly. In Australia as a whole the figure has increased from 1.29 per square mile in 1901 to 4.10 in 1968. The rise in density from 1901 to 1968 in each State and Territory was: New South Wales 4.45 to 14.32, Victoria 13.77 to 38.20, Queensland 0.76 to 2.63, South Australia, 0.95 to 2.99, Western Australia 0.20 to 0.95, Tasmania 6.68 to 14.63, Northern Territory 0.01 to 0.12, and Australian Capital Territory 2.05 (in 1911) to 124.84. When comparing the density of population of the several States, consideration should be given to the average annual rainfall distribution in each State as an indication of the climatic influence upon probable population numbers. The proportion of the area of Australia receiving an average of less than 10 inches of rainfall is 39 per cent; that of the various States is: New South Wales, 20 per cent; Victoria, nil; Queensland, 13 per cent; South Australia, 83 per cent; Western Australia, 58 per cent; and Tasmania, nil.

The number and density of population of the principal countries and continental groups of the world are shown in the tables on pages 159–61.

Sex distribution

The number of males to each hundred females has been adopted as a measure of the 'masculinity' of the population. With the exception of some dislocation arising from the two World Wars, there was a continuous diminution of the masculinity of the population until 1945. This resulted from the increasing proportion of the population in the higher age groups, in which females preponderate owing to their greater longevity, and the general long-term fall in the birth rate. At the 1947 census the numbers of the sexes were practically equal, but during the following decade there was an increase in masculinity owing to the greater number of males as compared with females in net overseas migration, and the recovery of the birth rate in the post-war period from the low levels of the 1930s. In more recent years, however, the trend has declined again.

POPULATION(*a*): MASCULINITY, STATES AND TERRITORIES, DECEMBER 1900 TO 1968

(Number of males per 100 females)

31 Dec.–	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1900 . .	111.14	101.23	125.33	101.95	157.54	107.97	753.60	(*b*)	110.55
1910 . .	109.23	98.71	119.02	103.12	132.90	104.14	486.32	(*b*)	107.87
1920 . .	104.31	97.38	112.00	99.83	114.55	101.67	270.04	116.70	103.47
1930 . .	103.39	99.14	110.66	100.97	117.17	101.53	263.66	118.69	103.85
1940 . .	100.98	97.85	108.48	98.91	110.38	102.74	240.31	124.62	101.81
1950 . .	100.88	99.27	106.02	101.83	106.07	102.70	188.05	123.33	101.83
1960 . .	101.38	101.35	104.16	102.24	103.99	102.88	147.82	111.51	102.22
1964 . .	100.75	100.64	103.13	101.19	103.97	101.98	124.61	108.43	101.53
1965 . .	100.68	100.52	102.99	101.03	103.99	101.83	123.36	108.70	101.43
1966 . .	100.64	100.46	102.83	100.91	103.94	101.71	121.93	107.56	101.36
1967 . .	100 65	100.50	102.75	100.93	103.82	101.73	120.91	106.80	101.35
1968 . .	**100.71**	**100.60**	**102.63**	**100.99**	103.67	101.72	119.45	107.16	101.39

(*a*) Excludes full-blood Aborigines before 1961. (*b*) Part of New South Wales prior to 1911.

The masculinity of the population in the principal countries of the world is shown in the table on pages 160-1.

Age distribution

The next table shows the changes which have taken place in the age distribution of the population of Australia since 1871.

POPULATION(*a*): PROPORTIONAL AGE DISTRIBUTION, BY SEX, AUSTRALIA 1871 TO 1966

(Per cent)

	Males				*Females*				*Persons*			
Census	*Under 15 years*	*15 years and under 65*	*65 years and over*	*Total*	*Under 15 years*	*15 years and under 65*	*65 years and over*	*Total*	*Under 15 years*	*15 years and under 65*	*65 years and over*	*Total*
1871 . .	38 84	59.11	2.05	100	46.02	52.60	1.38	100	42.09	56.17	1.74	100
1881 . .	36.36	60.81	2.83	100	41.86	56.03	2.11	100	38.89	58.61	2.50	100
1891 . .	34.80	62.01	3.19	100	39.38	58.09	2.53	100	36.92	60.19	2.89	100
1901 . .	33.89	61.80	4.31	100	36.51	59.88	3.61	100	35.14	60.88	3.98	100
1911 . .	30.84	64.82	4.34	100	32.52	63.28	4.20	100	31.65	64.08	4.27	100
1921 . .	31.64	63.88	4.48	100	31.79	63.83	4.38	100	31.71	63.86	4.43	100
1933 . .	27.53	66.09	6.38	100	27.42	65.99	6.59	100	27.48	66.04	6.48	100
1947 . .	25.49	67.08	7.43	100	24.62	66.71	8.67	100	25.06	66.89	8.05	100
1954 . .	28.81	63.82	7.37	100	28.23	62.52	9.25	100	28.52	63.18	8.30	100
1961 . .	30.61	62.16	7.23	100	29.85	60.33	9.82	100	30.23	61.26	8.51	100
1966 . .	29.88	63.03	7.09	100	28.86	61.13	10.01	100	29.37	62.09	8.54	100

(*a*) Excludes full-blood Aborigines.

Estimates of the age distribution of population, based on the census distribution of ages and records of births, ages at death, and ages of migrants, are made for intercensal years. The following table shows the estimated age distributions of the Australian population at 30 June 1967 and 1968.

POPULATION: ESTIMATED AGE DISTRIBUTION(a), AUSTRALIA
('000)

Age last birthday (years)	30 June 1967			30 June 1968		
	Males	Females	Persons	Males	Females	Persons
0– 4	590.8	560.3	1,151.1	588.8	588.6	1,147.4
5– 9	613.3	585.2	1,198.5	623.1	593.8	1,216.9
10–14	568.2	541.9	1,110.1	578.8	551.2	1,130.0
15–19	538.3	513.2	1,051.5	547.6	523.2	1,070.8
20–24	477.0	453.5	930.5	510.6	484.2	994.8
25–29	399.4	373.6	773.0	412.3	383.3	795.6
30–34	364.3	341.5	705.8	373.8	350.6	724.4
35–39	392.2	362.0	754.2	384.5	355.7	740.2
40–44	399.7	378.6	778.3	404.3	378.7	783.0
45–49	355.3	346.0	701.3	370.2	359.1	729.3
50–54	325.3	323.0	648.3	322.0	322.5	644.5
55–59	283.8	276.5	560.3	290.7	285.1	575.8
60–64	222.0	224.4	446.4	229.5	232.2	461.7
65–69	165.4	196.0	361.4	167.6	197.0	364.6
70–74	115.1	162.6	277.7	117.5	165.1	282.6
75–79	80.1	120.6	200.7	79.6	122.5	202.1
80–84	39.1	66.2	105.3	40.5	70.5	111.0
85 and over	18.2	37.6	55.8	18.1	38.0	56.1
Total	**5,947.5**	**5,862.7**	**11,810.2**	**6,059.5**	**5,971.3**	**12,030.8**

(a) Based on the age distribution of all persons enumerated at the Census of 30 June 1966 adjusted for mis-statement of age and on subsequent births, recorded ages at death and recorded ages of migrants.

General characteristics of the population, censuses, 1961 and 1966

Particulars of the characteristics of the population of Australia at the 1966 census compared with the 1961 census are shown in this section. Corresponding information for the individual States and Territories is shown in Year Book No. 54. Information concerning the industry, occupational status, and occupations of the population as recorded at the 1966 census is given in the chapter Employment and Unemployment, and on dwellings in the chapter Housing and Building.

The characteristics dealt with in the following pages are: age; marital status; country of birth; period of residence in Australia of overseas born; nationality; religion. Further details are available in a series of mimeographed bulletins which are listed in the chapter Miscellaneous. All tables exclude particulars of full-blood Aborigines.

POPULATION: AGE (GROUPED AGES)(a), BY SEX, AUSTRALIA
CENSUSES, 1961 AND 1966

Age last birthday (years)	Census, 30 June 1961			Census, 30 June 1966			Increase 1961–1966
	Males	Females	Persons	Males	Females	Persons	
0– 4	567,742	541,751	1,109,493	585,949	557,195	1,143,144	33,651
5– 9	536,046	511,475	1,047,521	595,538	567,358	1,162,896	115,375
10–14	522,407	497,577	1,019,984	556,251	530,197	1,086,448	66,464
15–19	414,788	394,145	808,933	536,848	511,378	1,048,226	239,293
20–24	361,531	335,907	697,438	436,709	417,232	853,941	156,503
25–29	342,443	313,628	656,071	384,336	361,729	746,065	89,994
30–34	386,175	351,793	737,968	355,654	331,700	687,354	−50,614
35–39	395,247	372,669	767,916	397,463	367,099	764,562	−3,354
40–44	343,973	334,554	678,527	396,536	377,215	773,751	95,224
45–49	335,890	321,941	657,831	343,033	334,639	677,672	19,841
50–54	293,004	275,023	568,027	323,810	317,824	641,634	73,607
55–59	238,051	225,330	463,381	276,100	266,916	543,016	79,635
60–64	190,805	210,048	400,853	215,590	219,759	435,349	34,496
65–69	149,130	184,654	333,784	161,376	195,020	356,396	22,612
70–74	116,939	148,048	264,987	115,084	160,887	275,971	10,984
75–79	69,223	95,724	164,947	79,634	116,753	196,387	31,440
80–84	33,069	52,627	85,696	38,568	64,296	102,864	17,168
85 and over	15,789	29,040	44,829	17,880	36,906	54,786	9,957
Total	**5,312,252**	**5,195,934**	**10,508,186**	**5,816,359**	**5,734,103**	**11,550,462**	**1,042,276**

(a) Recorded ages adjusted by the distribution of ages 'not stated'. Minus sign (−) denotes decrease.

POPULATION: MARITAL STATUS, BY SEX, AUSTRALIA, CENSUSES, 1961 AND 1966

Marital status	*Census, 30 June 1961*			*Census, 30 June 1966*			*Increase 1961–1966*
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	
Never married—							
Under 15 years of age	1,626,195	1,550,803	3,176,998	1,737,738	1,654,750	3,392,488	215,490
15 years of age and over	1,098,450	770,048	1,868,498	1,246,214	899,354	2,145,568	277,070
Total never married	*2,724,645*	*2,320,851*	*5,045,496*	*2,983,952*	*2,554,104*	*5,538,056*	*492,560*
Married	2,364,710	2,344,754	4,709,464	2,592,236	2,578,488	5,170,724	461,260
Married but permanently separated(a)	68,172	78,367	146,539	75,149	87,218	162,367	15,828
Divorced	38,640	43,339	81,979	42,885	51,143	94,028	12,049
Widowed	116,085	408,623	524,708	122,137	463,150	585,287	60,579
Grand total	**5,312,252**	**5,195,934**	**10,508,186**	**5,816,359**	**5,734,103**	**11,550,462**	**1,042,276**

(a) Legally or otherwise.

POPULATION: COUNTRY OF BIRTH, BY SEX, AUSTRALIA CENSUSES, 1961 AND 1966

Country of birth	*Census, 30 June 1961*			*Census, 30 June 1966*			*Increase 1961–1966*
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	
Australia	4,325,005	4,404,401	8,729,406	4,663,212	4,756,330	9,419,542	690,136
New Zealand	23,377	23,634	47,011	26,174	26,311	52,485	5,474
Europe—							
United Kingdom and Republic of Ireland(a)	400,491	354,911	755,402	474,427	434,237	908,664	153,262
Germany	57,579	51,736	109,315	55,799	52,910	108,709	−606
Greece	43,593	33,740	77,333	73,936	66,153	140,089	62,756
Italy	134,624	93,672	228,296	150,138	117,187	267,325	39,029
Malta	22,628	16,709	39,337	31,028	24,076	55,104	15,767
Netherlands	56,811	45,272	102,083	55,189	44,360	99,549	−2,534
Poland	36,395	23,654	60,049	36,496	25,145	61,641	1,592
Other	134,185	90,212	224,397	147,921	104,509	252,430	28,033
Total, Europe	886,306	709,906	1,596,212	1,024,934	868,577	1,893,511	297,299
Other countries	77,564	57,993	135,557	102,039	82,885	184,924	49,367
Total born outside Australia	*987,247*	*791,533*	*1,778,780*	*1,153,147*	*977,773*	*2,130,920*	*352,140*
Grand total	**5,312,252**	**5,195,934**	**10,508,186**	**5,816,359**	**5,734,103**	**11,550,462**	**1,042,276**

(a) Includes Ireland (undefined).
Minus sign (—) denotes decrease.

POPULATION: OVERSEAS BORN, BY PERIOD OF RESIDENCE IN AUSTRALIA, AND SEX CENSUSES, 1961 AND 1966

Period of residence (years)	*Census, 30 June 1961*			*Census, 30 June 1966*			*Increase 1961–1966*
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	
Under 1	72,162	51,169	123,331	88,608	73,252	161,860	38,529
1 and under 2	48,600	38,366	86,966	65,980	58,361	124,341	37,375
2 „ „ 3	47,126	42,901	90,027	58,366	51,963	110,329	20,302
3 „ „ 4	37,736	41,254	78,990	46,104	41,934	88,038	9,048
4 „ „ 5	42,600	41,284	83,884	35,623	37,279	72,902	−10,982
5 years and over	717,961	560,573	1,278,534	833,170	693,902	1,527,072	248,538
Not stated	21,062	15,986	37,048	25,296	21,082	46,378	9,330
Total	**987,247**	**791,533**	**1,778,780**	**1,153,147**	**977,773**	**2,130,920**	**352,140**

Minus sign (—) denotes decrease.

POPULATION: NATIONALITY (i.e. ALLEGIANCE), BY SEX AUSTRALIA, CENSUSES, 1961 AND 1966

Nationality	*Census, 30 June 1961*			*Census, 30 June 1966*			*Increase 1961–1966*
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	
British(*a*)—							
Born in Australia	4,325,005	4,404,401	8,729,406	4,663,212	4,756,330	9,419,542	690,136
Born outside Australia	686,611	568,692	1,255,303	871,263	748,582	1,619,845	364,542
Total British	*5,011,616*	*4,973,093*	*9,984,709*	*5,534,475*	*5,504,912*	*11,039,387*	*1,054,678*
Foreign—							
Dutch	41,216	34,601	75,817	25,941	22,014	47,955	−27,862
German	34,317	26,172	60,489	24,262	18,559	42,821	−17,668
Greek	32,763	28,238	61,001	53,344	53,333	106,677	45,676
Hungarian	8,210	5,816	14,026	3,411	2,353	5,764	−8,262
Italian	86,941	67,068	154,009	81,632	71,781	153,413	−596
Latvian, Lithuanian and Estonian	4,176	2,936	7,112	1,751	1,068	2,819	−4,293
Polish	12,939	9,474	22,413	7,784	5,998	13,782	−8,631
Yugoslav	17,745	9,637	27,382	24,024	14,229	38,253	10,871
Other (incl. Stateless)	62,329	38,899	101,228	59,735	39,856	99,591	−1,637
Total foreign	*300,636*	*222,841*	*523,477*	*281,884*	*229,191*	*511,075*	*−12,402*
Grand total	**5,312,252**	**5,195,934**	**10,508,186**	**5,816,359**	**5,734,103**	**11,550,462**	**1,042,276**

(*a*) All persons of individual citizenship status who, by virtue of the *Nationality and Citizenship Act* 1948–1966, are deemed to be British subjects. Includes naturalised British. For purposes of this table Irish nationality is included with British.

Minus sign (—) denotes decrease.

POPULATION: RELIGIOUS DENOMINATIONS, BY SEX, AUSTRALIA CENSUSES, 1961 AND 1966

Religious denomination	*Census 30 June 1961*			*Census 30 June 1966*			*Increase 1961–1966*
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	
Christian—							
Baptist	70,990	78,638	149,628	78,053	87,434	165,487	15,859
Brethren	7,265	8,228	15,493	7,434	8,082	15,516	23
Catholic, Roman(*a*)	602,763	536,886	1,139,649	581,934	522,035	1,103,969	−35,680
Catholic(*a*)	730,093	750,242	1,480,335	947,796	984,365	1,932,161	451,826
Churches of Christ	45,115	50,518	95,633	48,207	54,338	102,545	6,912
Church of England	1,834,732	1,834,208	3,668,940	1,929,663	1,947,810	3,877,473	208,533
Congregational	34,679	38,847	73,526	35,911	40,677	76,588	3,062
Orthodox	84,965	69,959	154,924	135,618	119,875	255,493	100,569
Lutheran	82,453	77,729	160,182	90,019	87,305	177,324	17,142
Methodist	528,003	548,392	1,076,395	548,392	575,918	1,124,310	47,915
Presbyterian	482,503	494,218	976,721	511,993	531,577	1,043,570	66,849
Salvation Army	24,379	26,735	51,114	27,078	29,423	56,501	5,387
Seventh-day Adventist	14,313	17,320	31,633	16,948	20,669	37,617	5,984
Protestant (undefined)	50,515	48,048	98,563	52,956	52,267	105,223	6,660
Other (including Christian undefined)	48,626	52,779	101,405	63,769	67,492	131,261	29,856
Total Christian	*4,641,394*	*4,632,747*	*9,274,141*	*5,075,771*	*5,129,267*	*10,205,038*	*930,897*
Non-Christian—							
Hebrew	29,571	29,758	59,329	31,301	31,970	63,271	3,942
Other	6,547	2,928	9,475	8,515	4,597	13,112	3,637
Total non-Christian	*36,118*	*32,686*	*68,804*	*39,816*	*36,567*	*76,383*	*7,579*
Indefinite	13,495	11,267	24,762	19,641	16,409	36,050	11,288
No religion	25,206	12,344	37,550	60,524	33,567	94,091	56,541
No reply	596,039	506,890	1,102,929	620,607	518,293	1,138,900	35,971
Grand total	5,312,252	5,195,934	10,508,186	5,816,359	5,734,103	11,550,462	1,042,276

(*a*) So described in individual census schedules.

Minus sign (—) denotes decrease.

The Aboriginal population of Australia

In Year Book No. 17, pages 951–61, a brief account was given of the Australian Aboriginal population, its origin, its numbers as estimated from time to time and the steps taken for its protection. On pages 914–16 of Year Book No. 22 particulars were shown for each of the States and Territories of Australia at successive periods, while a special article dealing with the estimated number and distribution of the native population at the date of first settlement of the white race in the continent appeared on pages 687–96 of Year Book No. 23.

Aborigines have been enumerated in all censuses of the Commonwealth, but the degree of coverage and information obtained has varied substantially since 1911. Since the census taken in 1933 the adequacy of the particulars obtained has improved progressively as a result of an increasing number of Aborigines coming into contact with more populated areas.

At the 1966 Census extensive arrangements were made to obtain as full a coverage of Aborigines as possible and to enumerate fully those Aborigines 'out of contact'. Throughout Australia the assistance of Aboriginal welfare bodies, mission superintendents, station owners, patrol officers, and police was sought in an effort to include all Aborigines and to obtain complete information about them, e.g. in the Northern Territory information was obtained from missions and settlements concerning Aborigines normally resident at such locations but who were absent at the time of the Census, and of Aborigines resident at such locations but who normally resided elsewhere. The two sets of information were then reconciled to produce what is considered to be a fairly complete and accurate coverage of Aborigines in the Territory.

The following table shows particulars of the Aboriginal population of Australia at the censuses of 30 June, 1954, 1961, and 1966. Because of some doubt about the accuracy of separate figures for full-blood and half-blood Aborigines as shown in previous issues of the Year Book, their separate publication has been discontinued.

ABORIGINAL POPULATION(*a*): STATES AND TERRITORIES
CENSUSES, 1954, 1961 AND 1966

State or Territory	*Census, 1954*			*Census, 1961*			*Census, 1966*		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
New South Wales . .	6,278	5,935	12,213	7,494	7,222	14,716	7,343	6,876	14,219
Victoria	691	704	1,395	899	897	1,796	856	934	1,790
Queensland . . .	8,368	7,781	16,149	10.146	9,550	19,696	9,644	9,359	19,003
South Australia . . .	1,675	1,537	3,212	2,607	2,277	4,884	2,914	2,591	5,505
Western Australia . .	6,564	6,135	12,699	8,351	7,925	16,276	9,505	8,934	18,439
Northern Territory . .	5,990	5,798	11,788	9,013	8,747	17,760	10,651	10,468	21,119
Australia(*b*) . . .	**29,716**	**28,006**	**57,722**	**38,612**	**36,697**	**75,309**	**40,984**	**39,223**	**80,207**

(*a*) Persons who stated themselves to be 'Aboriginal', or who stated themselves to be more than half Aboriginal, or who were half Aboriginal and half European. Enumerated population only (*see* below). (*b*) Includes Tasmania and Australian Capital Territory.

Prior to the 1966 census Aborigines 'out of contact' were not enumerated, and estimates of these were made by authorities responsible for native welfare. It is estimated that at the 1954 census 12,956 full-blood Aborigines (of which 2,311 were estimated to be in Queensland, 1,760 in South Australia, 3,516 in Western Australia, and 5,369 in the Northern Territory) were not contacted by census collectors and were not included in the census. Increasing numbers however, were coming into contact, and it is estimated that at the 1961 census 2,000 full-blood Aborigines in Western Australia and 1,944 in the Northern Territory were not contacted by census collectors. At the 1966 Census efforts were made to obtain complete coverage. *See* plate 17 facing page 128 for the geographical distribution of Aborigines enumerated at the 1966 census.

Torres Strait Islanders are not included in the above table, but are included in the census figures shown elsewhere in this chapter. At the 1966 census they numbered 5,403 persons.

Overseas arrivals and departures

In this section summary figures are given of the total movement of overseas passengers, and full details are given in respect of permanent arrivals and departures. For information on passengers in other categories, *see* Chapter 12, Transport, Communication and Travel.

More detailed statistics of overseas arrivals and departures, covering country of residence, country of embarkation or disembarkation, mode of travel, month of arrival or departure, etc., are shown in the tables of Section II, Overseas Arrivals and Departures, of the annual bulletin *Demography*. Monthly and quarterly mimeographed bulletins, containing the latest available statistics of overseas arrivals and departures, are also issued.

Overseas arrivals and departures since 1936

Earlier issues of the Year Book contain, in summary form, tables showing the increase of population by net migration from 1861 to the latest date, while information for individual years from 1881 is published in the annual bulletin *Demography*. The following table shows, for Australia, arrivals and departures since 1936, and refers to total movement irrespective of length of stay. Air crews and ships' crews, persons passing through Australia on board the same ship or flight, and also persons on short pleasure cruises in the south-west Pacific commencing and finishing in Australia on ships not then engaged in regular voyages, are excluded from Australian statistics of overseas arrivals and departures.

OVERSEAS ARRIVALS AND DEPARTURES, BY SEX: AUSTRALIA, 1936 TO 1968

	Total arrivals			*Total departures*			*Excess of arrivals over departures*		
Period	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
1936–40(*a*) . .	161,774	159,538	321,312	140,901	137,283	278,184	20,873	22,255	43,128
1941–45(*a*) . .	35,422	28,503	63,925	30,097	26,019	56,116	5,325	2,484	7,809
1946–50(*a*) . .	398,507	303,413	701,920	180,779	168,057	348,836	217,728	135,356	353,084
1951–55 . .	581,300	446,566	1,027,866	340,819	273,223	614,042	240,481	173,343	413,824
1956–60 . .	695,445	568,652	1,264,097	481,235	377,840	859,075	214,210	190,812	405,022
1961–65 . .	1,107,419	896,215	2,003,634	906,956	696,790	1,603,746	200,463	199,425	399,888
1964 . . .	252,669	199,688	452,357	200,611	152,404	353,015	52,058	47,284	99,342
1965 . . .	292,184	232,952	525,136	237,673	182,607	420,280	54,511	50,345	104,856
1966 . . .	313,219	244,372	557,591	268,313	202,352	470,665	44,906	42,020	86,926
1967 . . .	361,345	275,825	637,170	311,727	233,534	545,261	49,618	42,291	91,909
1968 . . .	465,232	306,560	771,792	403,748	254,991	658,739	61,484	51,569	113,053

(*a*) Excludes movements of defence personnel from September 1939 to June 1947.

Excess of arrivals over departures

The excess of total overseas arrivals over departures is one of the elements of population increase taken into account in preparing the estimated population for other than census dates (*see* pages 117 and 129 of this chapter). It is necessary to use statistics of total overseas arrivals and departures for this purpose, because Australian population statistics relate to the total population present in Australia at the date of the census or estimate, and not the population normally resident in Australia (which would include those temporarily overseas and exclude those temporarily visiting Australia) The two following tables give particulars of the net gain or loss of population due to overseas migration, according to age and marital status and according to country of birth.

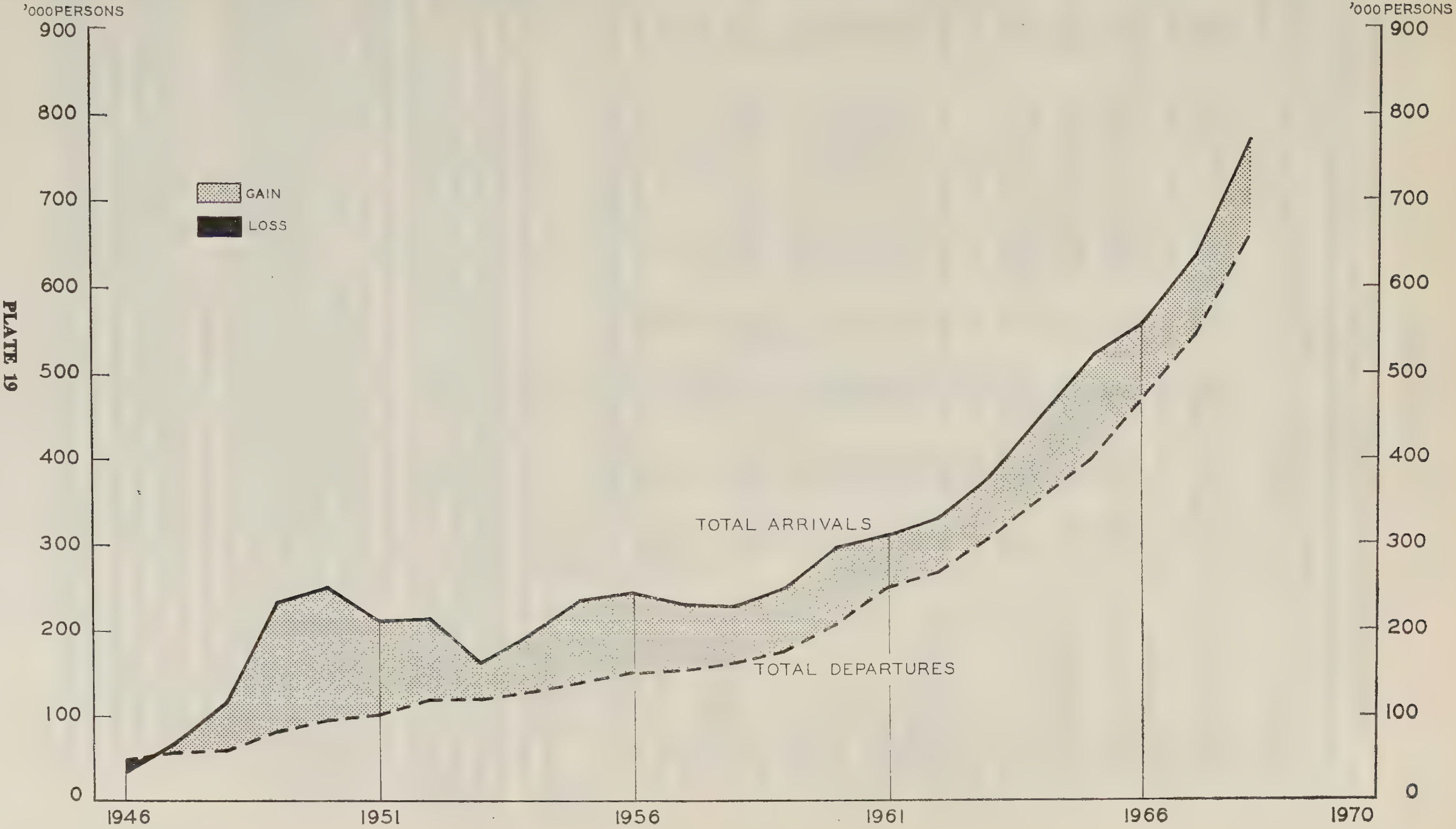
EXCESS OF ARRIVALS OVER DEPARTURES, BY SEX: AGE DISTRIBUTION AND MARITAL STATUS, AUSTRALIA, 1967 AND 1968

	1967			*1968*		
Age and marital status	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
AGE DISTRIBUTION						
Age last birthday on arrival or departure—						
0– 4 . . .	6,081	5,525	11,606	7,170	6,746	13,916
5–14 . . .	9,686	8,451	18,137	11,249	10,865	22,114
15–24 . . .	12,237	9,650	21,887	16,859	11,563	28,422
25–44 . . .	17,673	13,366	31,039	21,875	16,625	38,500
45–64 . . .	2,990	3,973	6,963	3,412	4,652	8,064
65 and over . .	951	1,326	2,277	919	1,118	2,037
Total . .	**49,618**	**42,291**	**91,909**	**61,484**	**51,569**	**113,053**
MARITAL STATUS						
Never married—						
Under 15 years of age	15,767	13,976	29,743	18,419	17,611	36,030
15 years of age and over . . .	15,033	7,409	22,442	18,423	7,671	26,094
Married . . .	18,108	19,126	37,234	23,531	23,822	47,353
Widowed . . .	249	1,272	1,521	341	1,798	2,139
Divorced . . .	461	508	969	770	667	1,437
Total . .	**49,618**	**42,291**	**91,909**	**61,484**	**51,569**	**113,053**

OVERSEAS ARRIVALS AND DEPARTURES: AUSTRALIA

1946 TO 1968

PLATE 19



EXCESS OF ARRIVALS OVER DEPARTURES, BY SEX: COUNTRY OF BIRTH AUSTRALIA, 1966 TO 1968

Country of birth	1966 Males	1966 Females	1966 Persons	1967 Males	1967 Females	1967 Persons	1968 Males	1968 Females	1968 Persons
Africa—									
Commonwealth countries	723	583	1,306	963	854	1,817	1,407	1,322	2,729
South Africa	98	134	232	127	186	313	261	217	478
Other	817	594	1,411	798	673	1,471	933	725	1,658
America—									
Canada	247	360	607	420	323	743	397	315	712
Other Commonwealth countries	83	74	157	126	52	178	127	117	244
United States of America	644	608	1,252	1,425	874	2,299	1,846	876	2,722
Other	159	189	348	146	163	309	273	241	514
Asia—									
Ceylon, India, Pakistan	956	1,010	1,966	1,188	1,042	2,230	2,027	1,832	3.859
Malaysia and Singapore	326	382	708	573	521	1,094	419	544	963
Other Commonwealth countries	347	438	785	333	485	818	402	491	893
China	35	160	195	213	331	544	70	345	415
Other	1,905	1,398	3,303	2,375	1,826	4,201	2,228	1,992	4,220
Europe—									
Malta	296	728	1,024	256	513	769	−13	306	293
United Kingdom and Ireland	30,617	28,706	59,323	25,893	22,978	48,871	29,155	26,204	55,359
Other Commonwealth countries	141	120	261	110	103	213	84	75	159
Austria	170	141	311	127	87	214	198	147	345
Germany	528	502	1,030	1,287	1,049	2,336	825	744	1,569
Greece	4,899	4,646	9,545	1,971	2,302	4,273	3,311	3,112	6,423
Italy	3,979	3,706	7,685	6,071	5,128	11,199	5,296	4,749	10,045
Netherlands	210	246	456	370	254	624	760	572	1,332
Poland	289	311	600	131	303	434	176	97	273
Spain	212	176	388	346	237	583	690	499	1,189
Yugoslavia	4,252	2,835	7,087	4,438	3,067	7,505	4,911	3,786	8,697
Other	1,262	934	2,196	2,293	1,697	3,990	4,799	3,606	8,405
Oceania—									
Australia	−10,897	−9,349	−20,246	−7,096	−6,435	−13,531	−5,763	−6,701	−12,464
New Zealand	1,934	1,648	3,582	3,405	2,693	6,098	5,462	4,200	9,662
Papua and New Guinea	156	256	412	456	322	778	336	414	750
Other Commonwealth countries	77	148	225	155	113	268	151	186	337
Other	39	20	59	18	18	36	3	17	20
At sea and not stated	402	316	718	700	532	1,232	713	539	1,252
Grand total	44,906	42,020	86,926	49,618	42,291	91,909	61,484	51,569	113,053

Minus sign (−) indicates excess of departures over arrivals.

Classification of travellers

Since 1 July 1924 overseas travellers have been classified according to declared intention in regard to residence into two principal categories, distinguishing movements for short terms from movements for longer periods (including permanently). Prior to 1957 these categories were *temporary* and *permanent*. Thereafter the categories were entitled *short-term* and *permanent and long-term*, but the basis of classification was not changed and the figures are directly comparable for the whole period. For short-term movements overseas visitors and Australian residents were identified separately.

Revised questions for travellers were introduced in mid-1958, and these enabled the separation, from 1 January 1959, of permanent from other long-term movements and also the identification among the permanent departures of former settlers departing.

The principal categories of travellers are as follows.

Permanent movement—consists of persons arriving with stated intention of settling permanently in Australia (settlers), and Australian residents departing with stated intention of residing permanently abroad; the latter include *former settlers*, i.e. persons who, on departure from Australia, stated that they had come to Australia to settle, had stayed for a period of twelve months or more and were now departing permanently.

Long-term movement—consists of the arrival of overseas visitors and the departure of Australian residents with stated intention of staying (in Australia or in a country abroad respectively) for twelve months or more; and the departure of visitors and the return of residents who have stayed (in Australia or in a country abroad respectively) for twelve months or more.

Short-term movement—consists of all other movements, including the movement of Australian troops irrespective of period of stay, and U.S. troops visiting Australia on rest and recreation leave.

This classification is based on statements made by the traveller on arrival in, or departure from, Australia. They represent the traveller's intention at that time. Many travellers subsequently change their intentions, and this must be borne in mind in interpreting the statistics.

The numbers so classified since 1 January 1941, on the basis of declared intention as to residence, and since 1 January 1961, on this basis supplemented by additional particulars as to stated purpose of journey, are as follows.

OVERSEAS ARRIVALS AND DEPARTURES: CLASSIFICATION OF TRAVELLERS AUSTRALIA, 1941 TO 1968

ARRIVALS

	Permanent and long-term movement				*Short-term movement*				
	Per-manent	*Long-term*		*Total permanent and long-term arrivals*		*Overseas visitors arriving*			
Period	*Settlers arriving*	*Australian residents returning*	*Overseas visitors arriving*		*Australian residents returning*	*In transit*	*Other*	*Total*	*Total arrivals*
1941–45 . .	n.a.	n.a.	n.a.	32,624	11,150	n.a.	n.a	20,151	63,925
1946–50 . .	n.a.	n.a.	n.a.	457,988	108,736	n.a.	n.a.	135.196	701,920
1951–55 . .	n.a.	n.a.	n.a.	570,090	216,949	77,825	163,002	240.827	1,027,866
1956–60 . .	n.a.	n.a.	n.a.	615,767	309,611	84,206	254.513	338,719	1,264,097
1961–65 . .	575,992	111,288	73,848	761,128	585,203	143,424	513,879	657,303	2,003,634
1964 . . .	134,464	23,641	15,020	173,125	131,354	31,583	116,295	147,878	452,357
1965 . . .	147,507	26,260	17,497	191,264	160,544	34,071	139,257	173,328	525,136
1966 . . .	141,033	28,292	19,234	188,559	181,770	32.593	154,669	187,262	557,591
1967 . . .	135,019	35,655	21,637	192,311	223,038	36,299	185.522	221,821	637,170
1968 . . .	159,270	36,387	23,473	219,130	252,773	37,672	262,217	299,889	771,792

DEPARTURES

	Permanent and long-term movement						*Short-term movement*		
	Permanent			*Long-term*		*Total per-manent and long-term depart-ures*			
Period	*Former settlers departing*	*Other residents departing*	*Total per-manent depart-ures*	*Australian residents departing*	*Overseas visitors departing*		*Australian residents departing*	*Overseas visitors departing*	*Total de-partures*
1941–45 . .	n.a.	n.a.	n.a.	n.a.	n.a.	22,399	9,163	24,554	56,116
1946–50 . .	n.a.	n.a.	n.a.	n.a.	n.a.	105,968	101,787	141,081	348,836
1951–55 . .	n.a.	n.a.	n.a.	n.a.	n.a.	155,509	212,978	245,555	614,042
1956–60 . .	n.a.	n.a.	n.a.	n.a.	n.a.	210,807	306,118	342,150	859,075
1961–65 . .	48,491	33,989	82,480	189,526	63,593	335,599	593,119	675,028	1,603,746
1964 . . .	7,828	7,255	15,083	40,958	13,085	69,126	133,248	150,641	353,015
1965 . . .	14,803	6,110	20,913	46,313	12,429	79,655	161,692	178,933	420,280
1966 . . .	18,343	7,965	26,308	54,321	11,999	92,628	183,161	194,876	470,665
1967 . . .	22,302	8,502	30,804	52,148	12,801	95,753	217,746	231,762	545,261
1968 . . .	23,814	7,861	31,675	51.386	12,617	95,678	251,880	311,181	658,739

Permanent movement

In the following paragraphs particulars are given of the *persons who on arrival in Australia stated that they came intending to settle*, and of *Australian residents who on their departure from Australia stated their intention of residing permanently abroad*, classified according to country of birth, nationality, occupation, age, marital status, State or Territory of intended residence (arrivals) or of last residence (departures), and country of birth and of last residence (arrivals) or of intended residence (departures).

Country of birth

OVERSEAS ARRIVALS AND DEPARTURES—PERMANENT MOVEMENT COUNTRY OF BIRTH, AUSTRALIA, 1967 AND 1968

(Persons)

Country of birth	1967 Arrivals Assisted (a)	1967 Arrivals Other	1967 Arrivals Total	1967 Departures	1968 Arrivals Assisted (a)	1968 Arrivals Other	1968 Arrivals Total	1968 Departures
Africa—								
Commonwealth countries	290	1,524	1,814	102	443	2,363	2,806	133
South Africa	239	228	467	155	252	328	580	168
Other	189	1,388	1,577	68	353	1,334	1,687	80
America—								
Commonwealth countries	252	835	1,087	325	255	945	1,200	308
United States of America	1,140	1,237	2,377	827	1,379	1,478	2,857	890
Other	105	230	335	51	246	309	555	57
Asia—								
Ceylon, India, Pakistan	387	1,838	2,225	113	498	3,319	3,817	133
Other Commonwealth countries	253	1,354	1,607	244	285	1,730	2,015	236
Other	317	4,080	4,397	301	765	3,897	4,662	293
Europe—								
Malta	1,007	737	1,744	375	935	513	1,448	348
United Kingdom and Ireland	59,488	7,096	66,584	15,340	66,195	7,552	73,747	16,293
Other Commonwealth countries	219	34	253	61	169	41	210	47
Austria	574	112	686	180	555	116	671	173
Belgium	252	37	289	52	250	38	288	59
Germany	3,227	708	3,935	818	3,044	591	3,635	957
Greece	2,672	5,332	8,004	431	5,976	4,498	10,474	401
Italy	1,370	13,223	14,593	530	5,079	9,722	14,801	556
Netherlands	1,293	452	1,745	770	2,360	597	2,957	841
Poland	199	497	696	157	198	277	475	147
Spain	759	362	1,121	73	1,470	345	1,815	91
Yugoslavia	3,434	5,126	8,560	396	4,688	5,286	9,974	352
Other	3,953	1,389	5,342	827	8,430	1,365	9,795	896
Oceania—								
Australia	305	231	536	7,516	508	226	734	7,013
New Zealand	44	3,774	3,818	981	64	6,254	6,318	1,072
Other Commonwealth countries	9	355	364	70	8	354	362	74
Other	1	20	21	12	1	19	20	7
At sea and not stated	269	573	842	29	696	671	1,367	50
Total	82,247	52,772	135,019	30,804	105,102	54,168	159,270	31,675

(a) For details of assisted passage schemes *see* pages 146–50.

Nationality

OVERSEAS ARRIVALS AND DEPARTURES—PERMANENT MOVEMENT NATIONALITY, AUSTRALIA, 1967 AND 1968

(Persons)

Nationality	1967 Arrivals Assisted (a)	1967 Arrivals Other	1967 Arrivals Total	1967 Departures	1968 Arrivals Assisted (a)	1968 Arrivals Other	1968 Arrivals Total	1968 Departures
British—								
Country of citizenship—								
Australia	223	1,109	1,332	8,470	331	1,097	1,428	7,713
Canada	60	825	885	344	80	869	949	349
Ceylon, India, Pakistan	2	1,498	1,500	35	16	3,009	3,025	47
Ireland(b)	1,261	191	1,452	315	1,763	186	1,949	312
Malta	909	730	1,639	365	793	500	1,293	342
New Zealand	23	4,031	4,054	901	31	6,610	6,641	1,050
South Africa(b)	135	159	294	106	169	249	418	103
United Kingdom and Colonies	58,025	8,553	66,578	13,835	65,754	8,838	74,592	14,590
Other countries	87	730	817	212	77	1,104	1,181	224
Citizenship not stated	2,498	700	3,198	1,599	1,435	1,832	3,267	1,790
Total, British	*63,223*	*18,526*	*81,749*	*26,182*	*70,449*	*24,294*	*94,743*	*26,520*

For footnotes *see* next page.

OVERSEAS ARRIVALS AND DEPARTURES—PERMANENT MOVEMENT NATIONALITY, AUSTRALIA, 1967 AND 1968—*continued*

(Persons)

	1967				*1968*			
	Arrivals				*Arrivals*			
Nationality	*Assisted (a)*	*Other*	*Total*	*Departures*	*Assisted (a)*	*Other*	*Total*	*Departures*
American (U.S.)	1,193	1,309	2,502	942	1,404	1,515	2,919	961
Austrian	591	102	693	162	532	94	626	161
Belgian	215	30	245	40	226	34	260	61
Dutch	1,359	511	1,870	713	2,451	701	3,152	843
German	3,006	636	3,642	702	2,650	520	3,170	879
Greek	2,693	5,488	8,181	357	6,029	4,626	10,655	353
Italian	1,427	13,503	14,930	443	5,398	9,900	15,298	498
Lebanese	7	2,066	2,073	17	13	1,895	1,908	21
Polish	84	455	539	85	89	208	297	76
Russian	1	100	101	28	2	64	66	38
Spanish	804	383	1,187	68	1,567	347	1,914	85
Yugoslav	3,237	5,203	8,440	256	4,788	5,590	10,378	279
Stateless	302	161	463	63	207	168	375	32
Other	4,105	4,299	8,404	746	9,297	4,212	13,509	868
Grand total	**82,247**	**52,772**	**135,019**	**30,804**	**105,102**	**54,168**	**159,270**	**31,675**

(*a*) For details of assisted passage schemes *see* pages 146–50. (*b*) Included with 'British nationality' for the purpose of this table.

Occupation

OVERSEAS ARRIVALS AND DEPARTURES—PERMANENT MOVEMENT OCCUPATION AND SEX, AUSTRALIA, 1967 AND 1968

	1967				*1968*			
	Arrivals		*Departures*		*Arrivals*		*Departures*	
Occupation group	*Males*	*Females*	*Males*	*Females*	*Males*	*Females*	*Males*	*Females*
Professional, technical, and related workers	4,236	2,456	1,671	1,026	5,591	3,126	1,708	1,143
Administrative, executive, and managerial workers	2,214	288	669	86	2,730	324	661	88
Clerical workers	2,349	4,879	684	1,632	2,654	5,900	684	1,661
Sales workers	1,757	854	529	279	2,159	1,046	506	304
Farmers, fishermen, hunters, timber getters, and related workers	2,275	60	271	10	2,176	73	282	11
Miners, quarrymen, and related workers	340	..	79	..	392	..	99	..
Workers in transport and communication	3,217	384	542	93	3,827	544	552	97
Craftsmen and production-process workers	18,773	2,198	4,210	513	22,275	2,421	4,143	528
Labourers	8,523	..	982	..	8,740	..	1,046	..
Service (protective and other), sport, and recreation workers	1,886	4,349	420	448	2,245	4,267	430	454
Occupation inadequately described or not stated	2,772	335	265	36	3,634	435	255	53
Persons not in work force—								
Children and students	23,595	21,544	5,141	4,769	28,155	25,934	5,386	4,953
Others	1,102	24,633	382	6,067	1,363	29,259	470	6,161
Total	**73,039**	**61,980**	**15,845**	**14,959**	**85,941**	**73,329**	**16,222**	**15,453**

Age and marital status

OVERSEAS ARRIVALS AND DEPARTURES—PERMANENT MOVEMENT, BY SEX, AGE DISTRIBUTION, AND MARITAL STATUS, AUSTRALIA, 1968

Age last birthday at time of arrival or departure	*Arrivals*				*Departures*			
	Never married	*Married*	*Widowed or divorced*	*Total*	*Never married*	*Married*	*Widowed or divorced*	*Total*
				MALES				
0– 4	10,591	..	..	10,591	1,948	..	..	1,948
5–14	14,966	..	..	14,966	2,968	..	..	2,968
15–24	17,091	3,844	52	20,987	2,192	455	2	2,649
25–44	8,401	23,212	545	32,158	1,638	4,733	79	6,450
45–64	352	5,279	302	5,933	153	1,460	100	1,713
65 and over	37	957	312	1,306	31	325	138	494
Total	*51,438*	*33,292*	*1,211*	*85,941*	*8,930*	*6,973*	*319*	*16,222*
				FEMALES				
0– 4	9,822	..	..	9,822	1,769	..	..	1,769
5–14	14,201	..	..	14,201	2,808	..	..	2,808
15–24	8,652	8,407	66	17,125	1,571	1,296	21	2,888
25–44	2,816	20,426	546	23,788	770	4,551	147	5,468
45–64	331	4,534	1,576	6,441	116	1,255	413	1,784
65 and over	73	620	1,259	1,952	39	235	462	736
Total	*35,895*	*33,987*	*3,447*	*73,329*	*7,073*	*7,337*	*1,043*	*15,453*
				PERSONS				
0– 4	20,413	..	..	20,413	3,717	..	..	3,717
5–14	29,167	..	..	29,167	5,776	..	..	5,776
15–24	25,743	12,251	118	38,112	3,763	1,751	23	5,537
25–44	11,217	43,638	1,091	55,946	2,408	9,284	226	11,918
45–64	683	9,813	1,878	12,374	269	2,715	513	3,497
65 and over	110	1,577	1,571	3,258	70	560	600	1,230
Total	**87,333**	**67,279**	**4,658**	**159,270**	**16,003**	**14,310**	**1,362**	**31,675**

State or Territory of intended residence (arrivals) or last residence (departures). The following table shows the number of settlers arriving in Australia by State or Territory of intended residence and the number of Australian residents departing permanently by State or Territory of last residence, for the years 1966 to 1968. Settlers are asked, on or before arrival, the State or Territory of Australia in which they next intend to stay for twelve months or more. The statements represent the settlers' intentions at the time and may not be realised. The allocation to States and Territories in the table is based on these statements, except that settlers proceeding to the migrant reception centre, Bonegilla, Victoria, are allocated, as far as is practicable, to the State or Territory of their placement from the centre. Residents departing permanently are asked the State or Territory in which they last stayed for twelve months or more.

OVERSEAS ARRIVALS AND DEPARTURES—PERMANENT MOVEMENT SETTLERS ARRIVING AND RESIDENTS DEPARTING, BY STATE OR TERRITORY OF INTENDED RESIDENCE (ARRIVALS) OR LAST RESIDENCE (DEPARTURES), 1966 TO 1968

(Persons)

State or Territory of intended residence (arrivals) or last residence (departures)	*Settlers arriving*			*Residents departing*		
	1966	*1967*	*1968*	*1966*	*1967*	*1968*
New South Wales	45,803	44,281	56,771	8,217	9,936	9,716
Victoria	39,372	37,735	42,680	5,997	6,920	7,340
Queensland	8,768	9,309	10,222	2,830	3,261	2,974
South Australia	21,116	14,331	14,358	3,437	4,265	3,895
Western Australia	16,694	18,379	23,538	2,020	2,309	3,366
Tasmania	1,899	1,878	2,315	458	462	473
Northern Territory	340	327	392	99	114	177
Australian Capital Territory	1,123	1,145	1,224	388	440	476
Not stated(*a*)	5,918	7,634	7,770	2,862	3,097	3,258
Total	**141,033**	**135,019**	**159,270**	**26,308**	**30,804**	**31,675**

(*a*) Includes also settlers passing through the migrant reception centre who were not placed in time for allocation to States.

Country of birth and country of residence. The principal countries of birth combined with the principal countries of last residence (arrivals) or intended residence (departures) are shown in the following table for the year 1968.

OVERSEAS ARRIVALS AND DEPARTURES—PERMANENT MOVEMENT SETTLERS ARRIVING AND RESIDENTS DEPARTING, BY COUNTRY OF BIRTH AND COUNTRY OF LAST RESIDENCE (ARRIVALS) OR OF INTENDED RESIDENCE (DEPARTURES), 1968

	Country of last residence (arrivals) or intended residence (departures)(a)										
ountry of birth	*Canada*	*Malta*	*New Zealand*	*United Kingdom and Ireland*	*Germany*	*Greece*	*Italy*	*South Africa*	*U.S.A.*	*Yugo-slavia*	*Other countries*
					SETTLERS ARRIVING						
ustralia . . .	7	4	67	416	21	16	25	8	61	2	107
anada . . .	671	..	48	139	3	..	2	2	63	..	50
alta	4	1,251	5	166	10	..	..	..	4	..	8
ew Zealand . .	16	1	6,024	187	1	..	..	10	17	..	62
nited Kingdom and Ireland . . .	326	17	1,609	69,838	190	4	21	253	192	..	1,297
ther Commonwealth countries . . .	34	..	119	1,321	27	6	3	47	16	5	7,854
ermany . . .	24	..	29	326	2,969	13	13	23	43	3	192
reece . . .	5	..	9	22	151	10,164	10	2	6	14	91
taly . . .	9	4	7	203	393	7	13,675	2	23	14	464
etherlands . . .	12	..	167	45	13	..	2	10	16	..	2,692
ugoslavia . . .	15	..	16	70	841	5	133	1	16	5,955	2,922
ther European countries	51	..	93	653	557	15	91	51	80	17	11,436
nited States of America	16	..	32	73	22	3	7	6	2,518	..	180
ther countries . .	43	6	85	430	164	133	58	354	72	7	6,152
t sea and not stated .	1	11	10	126	72	24	362	..	3	332	426
Total . . .	**1,234**	**1,294**	**8,320**	**74,015**	**5,434**	**10,390**	**14,402**	**769**	**3,130**	**6,349**	**33,933**
					AUSTRALIAN RESIDENTS DEPARTING PERMANENTLY						
Australia . . .	737	74	1,325	1,555	150	74	108	135	705	20	2,130
Canada . . .	187	..	10	36	1	..	..	4	32	..	25
Malta	5	308	2	21	..	..	4	1	5	..	2
New Zealand . .	18	..	958	37	4	..	..	3	9	..	43
United Kingdom and Ireland . . .	300	4	666	14,630	9	2	11	155	205	..	311
Other Commonwealth countries . . .	22	..	19	165	..	..	..	37	16	..	377
Germany . . .	49	..	12	40	654	2	6	41	77	1	75
Greece. . . .	35	..	4	3	2	263	..	9	75	..	10
Italy	41	..	13	11	2	..	436	1	28	..	24
Netherlands . . .	37	..	26	14	3	1	1	38	32	..	689
Yugoslavia . . .	32	..	11	5	11	..	10	2	23	239	19
Other European countries	112	..	33	68	54	1	8	21	142	3	924
United States of America	23	..	4	12	2	1	7	3	774	..	64
Other countries . .	38	1	13	61	1	7	1	114	68	..	301
At sea and not stated .	3	..	7	20	1	1	2	3	2	3	8
Total . . .	**1,639**	**387**	**3,103**	**16,678**	**894**	**352**	**594**	**567**	**2,193**	**266**	**5,002**

(*a*) For a period of twelve months or more.

Former settlers and other residents departing permanently—country of intended residence. The principal countries of intended residence of persons departing permanently during the years 1967 and 1968 are shown in the following table for 'former settlers' departing permanently (*see* definition on page 140) and other residents departing permanently.

OVERSEAS DEPARTURES—PERMANENT MOVEMENT COUNTRY OF INTENDED RESIDENCE(*a*) AUSTRALIA, 1967 AND 1968

Country of intended residence(a)	*1967*			*1968*		
	Former settlers	*Other residents*	*Total*	*Former settlers*	*Other residents*	*Total*
Canada	884	817	1,701	839	800	1,639
New Zealand	2,601	2,066	4,667	1,641	1,462	3,103
Papua and New Guinea	200	1,464	1,664	194	1,279	1,473
United Kingdom and Ireland	13,050	1,710	14,760	15,031	1,647	16,678
Other Commonwealth countries	731	656	1,387	722	604	1,326
Total, Commonwealth countries	*17,466*	*6,713*	*24,179*	*18,427*	*5,792*	*24,219*
Germany	580	140	720	724	170	894
Italy	422	115	537	459	135	594
Netherlands	564	175	739	684	211	895
Other European countries	1,239	264	1,503	1,396	340	1,736
United States of America	1,357	806	2,163	1,379	814	2,193
Other countries	674	289	963	745	399	1,144
Total, foreign countries	*4,836*	*1,789*	*6,625*	*5,387*	*2,069*	*7,456*
Grand total	**22,302**	**8,502**	**30,804**	**23,814**	**7,861**	**31,675**

(*a*) For a period of twelve months or more.

Assisted migration into Australia

Detailed statistics of assisted migration into Australia are shown in *Australian Immigration: Consolidated Statistics* and *Australian Immigration: Quarterly Statistical Summary* published by the Department of Immigration.

Immigration has always been a major factor in Australia's economic growth. Since the 1939–45 War immigration programmes have been pursued as a central feature of government policies for national development. Since 1945 successive Australian governments have borne a substantial part of the passage costs of selected migrants from overseas countries. This assistance has in some cases been matched or partly matched by contributions from the government of the emigration country and from international funds. The trend in recent years has been towards financial assistance by the Australian Government with a nominal personal contribution by the migrant. The basis of operation has varied from country to country—bilateral migration agreements have been negotiated with some countries, migration arrangements have been made through the Intergovernmental Committee for European Migration (ICEM) with other countries, and in other instances unilateral assistance has been given by the Australian Government. The following table shows the numbers of persons who were assisted to come to Australia by the Australian Government under all assisted passage schemes during the period 1946 to 1968.

ASSISTED MIGRATION: AUSTRALIA, 1946 TO 1968

Period	*Nominated and selected (assisted) arrivals*
1946–50	273,195
1951–55	275,241
1956–60	305,517
1961–65	337,132
1963	62,914
1964	79,604
1965	93,653
1966	89,743
1967	82,247
1968	105,102

Details of the joint scheme of assisted immigration arrived at by agreement between the Commonwealth and State Governments, which operated from 1920 to 1939, were published in earlier issues of the Year Book (*see* No. 38, page 576). After the outbreak of hostilities in 1939 it was decided to discontinue the grant of assisted passages for the duration of the war.

Migration from Britain

At the conclusion of the 1939–45 War two migration agreements were negotiated between the Australian and British Governments and signed on 5 March 1946. These agreements came into operation on 31 March 1947 and provided respectively for granting free passages to British ex-servicemen and their dependants and assisted passages to other residents of Britain wishing to settle permanently in Australia. The free passage agreement was terminated on 28 February 1955, but the assisted passage agreement has continued in operation by renewal from time to time. It is now valid until 31 May 1972.

Assisted passages. Under the present agreement the British Government contributes £Stg150,000 per annum towards the cost of the movement of migrants to Australia. Each migrant 19 years of age or over contributes £Stg10 towards his passage costs. Migrants under 19 years of age make no contribution. The Australian Government meets the balance of the overall transport costs.

Eligibility for consideration for assisted passages is confined generally to citizens of the United Kingdom and Colonies, normally resident in Britain. Within those broad conditions of eligibility the following six categories of applicants may be granted assisted passages under current arrangements: *personal nominees*—persons sponsored by relatives or friends already established in Australia who provide accommodation for their nominees; *group nominees*—workers and their dependants sponsored or selected to meet labour requirements specifically notified by public and private employers; *Commonwealth nominees*—workers and their dependants selected to meet labour requirements within industry generally in Australia; '*bring out a Briton*' *nominees*—persons sponsored by special voluntary committees formed throughout Australia to stimulate the flow of British migrants through community effort; *single men and women and married couples without children*—persons with a minimum capital of £Stg25 each, selected without specific nomination, who are prepared to make their own accommodation arrangements upon arrival; '*nest-egg families*'—families with a minimum capital of £Stg1,000 and prepared to make their own accommodation arrangements on arrival.

Hostels are operated by the Australian Government and also by the State Governments to provide transit or temporary accommodation for certain groups of newly arrived migrants.

Number of arrivals. The numbers of British migrants who came to Australia under the Free and Assisted Passage Agreement during the period January 1947 to June 1968 are given in the following table according to the State or Territory of intended residence.

UNITED KINGDOM FREE AND ASSISTED PASSAGE AGREEMENT: NUMBER OF MIGRANTS(*a*), STATES AND TERRITORIES OF INTENDED RESIDENCE JANUARY 1947 TO JUNE 1968

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*A.C.T. and N.T.*	*Cwlth nominees(b)*	*Total*
January 1947 to June 1962	88,483	98,369	45,929	36,070	35,389	12,483	4,067	107,148	427,938
1962–63	8,093	6,118	2,980	4,512	5,294	677.	271	13,755	41,700
1963–64	12,272	10,791	4,272	10,509	4,894	909	316	10,667	54,630
1964–65	18.353	12,737	4,997	11,155	5,259	1,166	336	16,685	70,688
1965–66	15,256	10,249	4,410	12,205	8,510	1,173	393	18,558	70,754
1966–67	13,894	9,652	4,040	9,330	12,040	1,209	395	20,010	70,570
1967–68	11,217	7,856	3,516	6 392	10,864	1,189	376	14,467	55,877
Total, January 1947 to June 1968	**167,568**	**155,772**	**70,144**	**90,173**	**82,250**	**18,806**	**6,154**	**201,290**	**792,157**

(*a*) Includes child migrants as shown below. (*b*) *See* text above for explanation.

Child migration from Britain

The pre-war arrangements under which child migrants were brought to Australia under the sponsorship of various religious denominations and voluntary organisations were resumed in 1947. Under current arrangements these young migrants receive assisted passages and special maintenance provisions involving the British Government and the Australian and State Governments. From the beginning of 1947 to 30 June 1968 a total of 8,422 British child and youth migrants arrived under sponsorship, 6,004 to New South Wales, 1,378 to Western Australia, 584 to Victoria, and 456 to other States. These arrivals are included in the table above.

Maltese migration

The Australian Government and the Government of Malta entered into an agreement on 28 April 1965, under which financial assistance is granted jointly towards the movement to Australia of approved migrants from Malta. The agreement supersedes earlier ones signed in 1948 and 1956. ICEM (Intergovernmental Committee for European Migration—*see* page 146) is associated with the assisted migration arrangements under this agreement. Up to 30 June 1968 a total of 39,296 Maltese had arrived under these assisted passage schemes.

Netherlands migration

Details of early agreements between the Netherlands and Australia were given in Year Books No. 39, page 567, and No. 53, page 196. The Australia-Netherlands Migration and Settlement Agreement was signed on 1 June 1965. In accordance with Article II of that agreement an 'Australian-Netherlands Assisted Passage Migration Arrangement' was negotiated to come into force concurrently with the agreement. The agreement is for a basic period of five years but will then continue indefinitely subject to termination at one year's notice by either party. The 'Arrangement' will normally run for the same period as the 'Agreement' but may be terminated at 180 days notice by either party. Passage costs are met by the Australian Government, the migrants and in certain circumstances the Netherlands Government. Transportation is arranged by the Netherlands Government. The Australian Government is responsible for the reception of assisted migrants and for general assistance towards their settlement in Australia. ICEM is associated with the assisted migration arrangements under this agreement. Up to 30 June 1968, 73,017 Dutch assisted migrants had arrived in Australia.

Italian migration

A migration agreement between Italy and Australia came into operation on 1 August 1951 and continued in operation under extensions until 31 January 1964. A new Migration and Settlement Agreement was signed on 26 September 1967, and an assisted migration arrangement was entered into in conjunction with this Agreement. This provides for the movement to Australia under assisted passage arrangements of selected Italian workers in categories and numbers as agreed between the Australian and Italian Governments. Dependants of selected workers are also moved under assisted passage arrangements. Provision is also made for movement as nominated dependants of the wives and dependent children of any selected workers who move in advance of their families; and of the unmarried sisters, unmarried daughters, fiancees and proxy wives of Australian residents. Single women of marriageable age who are neither relatives nor fiancees may also be sponsored for assisted passages. Passage costs are met by the migrant and the Australian Government. The Australian Government is responsible for the reception of assisted migrants and for general assistance towards their settlement in Australia. ICEM is associated with the assisted migration arrangements under this agreement. Up to 30 June 1968, 42,977 Italian assisted migrants had settled in Australia.

German migration

On 29 August 1952 a migration agreement between the Federal Republic of Germany and Australia came into force under which selected German workers and their dependants could receive assisted passages to Australia. The agreement was renewed for five years from 29 August 1957, but assisted migration under the terms of the 1957 agreement continued until a new agreement was signed on 21 June 1965, to run indefinitely subject to one year's notice of termination by either party. Passage costs are met by the migrant, the Australian Government, and in certain circumstances the German Government. The Australian Government is responsible for the reception of assisted migrants and for general assistance towards their settlement in Australia. ICEM is associated with the assisted migration arrangements under this agreement. Up to 30 June 1968, 85,073 German assisted migrants had settled in Australia.

Austrian migration

Late in 1952 arrangements were made between the Austrian Government, the Australian Government and ICEM under which selected Austrian workers and their dependants could receive assisted passages to Australia. These arrangements still apply. Contributions to passage costs are made by the migrant and the Australian Government. Transportation is arranged by ICEM. The Australian Government is responsible for the reception of assisted migrants and for general assistance towards their settlement in Australia. Up to 30 June 1968, 20,331 Austrian assisted migrants had settled in Australia.

Greek migration

Late in 1952 arrangements were made between the Greek Government, the Australian Government and ICEM under which selected Greek workers and their dependants could receive assisted passages to Australia. These arrangements still apply. Contributions to passage costs are made by the migrant and the Greek and Australian Governments. The Australian Government is responsible for the reception of assisted migrants and for general assistance towards their settlement in Australia. Up to 30 June 1968, 49,497 Greek assisted migrants had settled in Australia.

Spanish migration

In 1958 arrangements were made between the Spanish Government, the Australian Government and ICEM under which selected Spanish workers and their dependants could receive assisted passages to Australia. At the request of the Spanish authorities these arrangements, so far as workers are concerned, were temporarily suspended in March 1963. Since then certain female dependants nominated by Spanish assisted migrants already in Australia have continued to arrive in Australia as assisted migrants. Negotiations with the Spanish Government have resulted in approval in principle of the resumption of worker movements on a limited scale with costs being met by the Australian Government and the migrant. Dependants of selected workers will also be moved by the Australian Government under assisted passage arrangements. The Australian Government is responsible for the reception of assisted migrants and for general assistance towards their settlement in Australia. Up to 30 June 1968, 8,250 Spanish assisted migrants had settled in Australia.

Belgian migration

On 1 February 1961 arrangements were made between the Belgian Government, the Australian Government and ICEM under which selected Belgian workers and their dependants could receive assisted passages to Australia. These arrangements still apply. Contributions to passage costs are made by the migrant and the Belgian and Australian Governments. The Australian Government is responsible for the reception of assisted migrants and for general assistance towards their settlement in Australia and ICEM for transportation. Up to 30 June 1968, 2,311 Belgian assisted migrants had settled in Australia.

Turkish migration

An agreement with the Turkish Government was signed on 5 October 1967 to run indefinitely subject to termination at ninety days notice by either Government. This provides for the assisted passage movement to Australia of selected Turkish workers and their dependants. The numbers and categories of workers to be moved annually are as agreed from time to time between the Australian and Turkish Governments. Passage costs are met by the Australian Government and the migrant. Transportation and reception arrangements are the responsibility of the Australian Government.

Refugee migration

By agreement with the International Refugee Organization, Geneva, on 21 July 1947, Australia undertook to provide resettlement opportunities for displaced persons. A total of 170,700 displaced persons arrived in Australia under this agreement in the following years. The International Refugee Organization was terminated in 1951 and refugee problems became the responsibility of the United Nations High Commissioner for Refugees, whose office was created by the United Nations specifically for this purpose. At about the same time ICEM was established partly to provide arrangements for the actual resettlement overseas of refugees, particularly with regard to transport.

Australia has continued to provide resettlement opportunities for refugees from Europe and elsewhere. In the period from 1945 to 30 June 1968, 322,636 refugees had been resettled in Australia including the 170,700 displaced persons mentioned above. Of the total number of refugees received by Australia since the end of World War II up to 30 June 1968, 218,473 have received financial assistance from the Australian Government towards their passage costs.

General Assisted Passage Scheme

This scheme has operated since 10 September 1954 and provides for a contribution by Australia towards passage costs to be granted to selected British and non-British workers and their dependants from a number of countries. Australia provides for the reception of migrants accepted under this scheme and for general assistance towards their settlement in Australia. In recent years the General Assisted Passage Scheme has been superseded in Europe and South America by the Special Passage Assistance Programme. Up to 30 June 1968, 36,729 assisted migrants had settled in Australia under the General Assisted Passage Scheme.

Special Passage Assistance Programme

This programme has applied since 1 July 1966 to selected applicants residing in Britain, Ireland, continental Europe (excluding Luxembourg and Communist countries), Malta and, since 27 February 1968, in the countries of South America. It has recently been extended to cover certain single women of marriageable age living in Yugoslavia and sponsored from Australia. Persons in those countries who are already eligible under existing assisted passage schemes are not considered for the Special Passage Assistance Programme. Approved applicants may make their own travel arrangements or from Europe travel by sea or air on bookings made by the Department of Immigration. For those persons who travel privately and are over nineteen years, a contribution of $25 towards passage costs is required and the extent of assistance is up to $335. Persons under nineteen years make no contribution and receive assistance up to $360. Approved migrants who travel on departmentally arranged bookings make the same passage contribution, and the balance of movement costs from their place of residence overseas to the port of disembarkation in Australia is met by the Australian Government. Up to 30 June 1968, 15,808 assisted migrants had settled in Australia under the Programme.

The Intergovernmental Committee for European Migration (ICEM)

This Committee, like the office of the United Nations High Commissioner for Refugees, was established to perform functions that had formerly been carried out by the International Refugee Organization. In addition to assuming responsibility for the resettlement of refugees, ICEM has been concerned also with the movements of national migrants from Europe. Australia was one of the sixteen foundation members of the Committee; there are now thirty-one member countries including the British Commonwealth countries of Australia and Malta.

The three main functions of ICEM are the movement of national migrants and the provision of related services; the resettlement of refugees and the provision of related services; and developmental activities and technical co-operation (this includes activities such as language teaching, vocational and orientation training, and in particular measures to facilitate the acceptance of European migrants by Latin American countries).

Each member government is required to contribute an agreed percentage of the Committee's administrative expenditure. Contributions to its operational expenditure are voluntary and governments may stipulate the terms and conditions under which they are to be used.

Up to 30 November 1968 ICEM had moved 1,598,308 persons, of whom 510,156 (362,571 nationals and 147,585 refugees) had departed for Australia.

Summary of arrivals of assisted migrants

The following table shows the number of assisted migrants who arrived in Australia in each of the last five financial years and since January 1947. All arrivals included in this table have obtained some financial assistance from the Australian Government towards payment of their passage money. Transport to Australia for the migrants concerned has been arranged on ships and aircraft under charter to the Department of Immigration, ships and aircraft under charter to the Intergovernmental Committee for European Migration, and normal commercial shipping and airlines. The arrivals under these schemes include a small number of nationals of countries other than those referred to, and stateless persons.

ARRIVALS UNDER ASSISTED MIGRATION SCHEMES: AUSTRALIA, JANUARY 1947 TO JUNE 1968

Assisted migration scheme	*January 1947 to June 1963*	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*	*January 1947 to June 1968*
Austrian	17,122	594	769	824	556	466	20,331
Belgian	1,152	318	155	201	236	249	2,311
General Assisted Passage(*a*)	20,188	3,327	3,605	4,924	2,584	2,101	36,729
German	69,814	2,987	2,870	3,266	2,932	3,204	85,073
Greek	33,608	2,633	3,507	2,673	2,888	4,188	49,497
Italian	40,675	195	158	281	287	1,381	42,977
Maltese	28,944	2,665	3,655	2,368	754	910	39,296
Netherlands	65,065	1,585	1,551	1,652	1,383	1,781	73,017
Refugee	207,616	2,040	1,609	2,177	1,805	3,226	218,473
Spanish	7,880	78	49	70	91	82	8,250
Special Passage Assistance Programme	..	..	..	..	4,638	11,170	15,808
United Kingdom	469,638	54,630	70,688	70,754	70,570	55,877	792,157
Other schemes	28,682	..	..	..	..	..	28,682
Total	**990,384**	**71,052**	**88,616**	**89,190**	**88,724**	**84,635**	**1,412,601**

(*a*) Mostly Scandinavians, U.S. Americans, and British nationals from countries other than the United Kingdom.

Immigration Advisory, Planning and Publicity Councils

Three bodies have been established to advise the Minister for Immigration on the social, economic and publicity aspects of the immigration programme.

The *Immigration Advisory Council*, established in 1947, consists of representatives of major national organisations (e.g. the Australian Council of Trade Unions, the Returned Servicemen's League of Australia, and the National Youth Council) and advises the Minister on the social aspects of immigration. The *Immigration Planning Council*, established in 1949, consists of eminent persons chosen in their own right; it advises the Minister on the economic considerations affecting the immigration programme. The *Immigration Publicity Council*, established in 1962, advises on publicity and publications used in Australia and overseas. Its members represent the press (including the foreign language newspapers), radio and television interests.

Professional migration

The Department of Immigration, working in close co-operation with the Department of Labour and National Service, provides a special service, including advisory staff in London, to encourage immigration of professionally qualified persons by giving advice and information on prospects in Australia and by putting such applicants in touch with Australian employers.

The regulation of immigration into Australia

Powers and legislation of the Commonwealth

Under section 51 (xix), (xxvii) and (xxviii) of the Commonwealth Constitution, the Parliament of the Commonwealth is empowered to make laws with respect to immigration, emigration, aliens and the influx of criminals. Immigration into Australia is regulated by the *Migration Act* 1958–1966 which came into force on 1 June 1959.

Any immigrant entering Australia after the commencement of the Act without having been granted an 'entry permit' or who is not within an exempted class is a prohibited immigrant. Exempted persons include diplomatic, consular and trade representatives of other countries, and seamen who enter with leave while their ships are in Australian ports. For the purposes of the Migration Act an immigrant includes a person entering for temporary stay.

An entry permit is normally granted at the port of entry by means of a stamp in the traveller's passport or equivalent travel document. No form of application is involved. Temporary permits are granted to visitors and persons whose stay is to be of limited duration. For other persons permits are issued without limitation as to stay. A person who is refused an entry permit must not be permitted (by the carrier company) to enter Australia; otherwise the carrier company is liable to a fine of $1,000.

The Act regulates the deportation of persons who enter Australia without an entry permit, who overstay their approved period of residence or who are convicted of crimes. It also contains provisions relating to the emigration of children and Aborigines.

The Act does *not* affect passport or visa requirements for travel to Australia. All persons who, prior to the 1958 Act, had been required before embarkation to obtain visas or other kinds of authority to proceed to Australia, are still required to obtain them. Likewise, persons who have not had to obtain prior authority to proceed to Australia are not now required to obtain such authority solely as a result of the Act. Persons previously allowed to enter without production of passports—notably British people arriving from New Zealand—are still able to do so.

The *Aliens Act* 1947–1966 provides that a register of aliens shall be maintained for every State and mainland Territory of Australia. Unless exempted, aliens 16 years of age and over are required to register with the Department of Immigration and to notify the Department of their address, occupation, or employment during the month of September each year. They are required to notify marriage within thirty days of marriage taking place. The Act provides also that the consent of the Department must be obtained before an alien may change his surname.

The *Immigration (Guardianship of Children) Act* 1946–1966 provides that the Minister for Immigration becomes the legal guardian of every person under the age of 21 years who enters Australia (except for certain exempted groups) other than in the charge of, or for the purpose of living in the care of, a parent or adult relative. It is primarily administered through the child welfare authorities in each State and mainland Territory who, as the Minister's delegates under the Act, supervise the welfare of each 'immigrant child'.

Conditions of immigration into Australia

Admission of non-Europeans. Australia's immigration policy is based on the need to maintain a predominantly homogeneous population. It is fundamental to the policy that people coming to Australia for residence should be capable, both economically and socially, of ready integration into the community.

Australia does not exclude from residence persons of other than European origin. Immigration laws and policy permit the Minister to authorise their entry, taking into account the qualifications of persons wishing to settle here, their ability to integrate readily into the community, and other aspects including considerations of a humanitarian nature and broad national interest.

The present policy provides, *inter alia*, that:

non-Europeans, who are the spouses, unmarried minor children, aged parents or fiancees of Australian citizens, and of other British subjects already having resident status, or eligible to enter with such status, may be admitted for permanent residence (the non-European wife and unmarried minor children of a European alien in similar circumstances may also be admitted for residence);

non-Europeans who have already been admitted under temporary permit but with the expectation of indefinite stay may, after completing five years' residence, qualify to apply for resident status and subsequently for citizenship.

The following examples of persons may be considered for entry for settlement, accompanied by their wives and children, on the basis of their general suitability and possession of qualifications positively useful to Australia:

persons with specialised technical skills for appointments for which local residents are not available;

persons of high attainment in the arts and sciences, or of prominent achievement in other ways;

persons nominated by responsible authorities or institutions for specific important professional appointments, which otherwise would remain unfilled;

executives, technicians, and other specialists who have spent substantial periods in Australia—for example, with the branches here of large Asian companies—and who have qualifications or experience in positive demand here;

businessmen who in their own countries have been engaged in substantial international trading and would be able to carry on such trade from Australia;

persons who have been of particular and lasting help to Australia's interest abroad in trade or in other ways;

persons who by former residence in Australia or by association with Australia have demonstrated an interest in or identification with Australia that should make their future residence here feasible.

In addition to visitors and students, provision exists also for the entry on a limited temporary residence basis of staffs of companies, professional, technical and specialist personnel, and of persons coming for medical treatment, religious training, or as sportsmen and entertainers, and in other miscellaneous categories.

Private students. Young people may enter Australia for the purpose of study, irrespective of their countries of origin. The greater proportion of such private students in Australia are from Asia, the Pacific area and, to a lesser extent, from the continent of Africa (there are at present more than 10,000 Asian and other non-European private students in Australia). The objective is to provide the opportunity for young people in these areas to come to Australia for advanced secondary, tertiary and other post-secondary study and training which will result in qualifications in demand and of use in their countries. The student, as well as meeting other requirements of entry, must have the capacity to undertake the course of study proposed and produce evidence of enrolment and assurances as to maintenance and accommodation. The student is admitted with temporary residence status and is required to acknowledge that he is obliged to return home on completing the approved course of study or training and that authority for stay and for extensions of stay as a student is dependent upon satisfactory academic progress.

Persons of European descent. Aliens of European descent, Maltese, Cypriots, Mauritians and residents of the Seychelle Islands desiring to settle permanently in Australia are required to obtain authority for admission from the Department of Immigration or an Australian overseas post. Their admission under the present policy is subject to clearance on health, character, and security grounds, and depends on their suitability as settlers generally.

Passports

Australian passports are issued under the *Passports Act* 1938–1966 and Passport Regulations. Passports are obtainable on application at offices of the Commonwealth Department of Immigration in each State, the Northern Territory, and the Australian Capital Territory, from overseas offices of that Department, from any Australian diplomatic or consular mission abroad, or from the office of any Australian Government Trade Commissioner overseas. Applicants for passports must furnish evidence of their identity and nationality and pay a fee of four dollars. Approximately 95,000 Australian passports are issued each year in Australia and abroad.

Citizenship and naturalisation

Commonwealth legislation

Statistics of persons granted Australian citizenship are shown in *Australian Immigration: Consolidated Statistics* published by the Department of Immigration.

The *Nationality and Citizenship Act* 1948–1967 commenced on Australia Day (26 January) 1949, and repealed all previous Commonwealth legislation on this subject. The most significant effect of the Act was the creation for the first time of the status of 'Australian Citizen'. In this respect the Act was complementary to citizenship legislation passed or about to be passed by other countries of the British Commonwealth. All Australian citizens, and the citizens of other countries of the British Commonwealth, are declared to be British subjects. The status of 'British subject' flows from the possession of citizenship of one of the Commonwealth countries. It could best be described as the connecting link between the citizenship of the countries of the British Commonwealth. Australian citizenship was automatically acquired as from 26 January 1949 by persons who were British subjects at that date and who either (*a*) were born in Australia or New Guinea; or (*b*) were naturalised in Australia; or (*c*) had been residing in Australia during the five years immediately preceding 26 January 1949; or (*d*) were born outside Australia of fathers to whom (*a*) or (*b*) above applied (provided the persons concerned had entered Australia without being placed under any immigration restriction); or (*e*) were women who had been married to men who became Australian citizens under the above headings (provided that the women concerned had entered Australia without being placed under immigration restriction). For the purposes of the Act, 'Australia' includes the Territories of the Commonwealth which are not Trust Territories. By an amendment of the Act in 1950 it was further provided that Nauru should be treated in the same manner as New Guinea.

Citizenship may be acquired in the following ways: (*a*) by birth in Australia; (*b*) by birth outside Australia, of a father who is an Australian citizen, provided that the birth is registered at an Australian Consulate; (*c*) by registration—Certificates of Registration as Australian citizens may be granted by the Minister to British subjects or Irish citizens who make application and satisfy the Minister that they can comply with specified requirements as to residence in Australia, good character and intention to reside permanently in Australia; (*d*) by naturalisation—Certificates of Naturalisation as Australian citizens may be granted by the Minister to aliens and protected persons who make application and can comply with requirements somewhat similar to those previously required under the *Nationality Act* 1920–1946. Requirements for naturalisation are: (i) as a rule five years residence in Australia, but residence in other British countries or service under a British Government may be accepted (special concessions in the matter of residence qualifications are available to persons who have enlisted in the Australian armed forces); (ii) the applicants must have an adequate knowledge of the responsibilities and privileges of citizenship. Certificates do not take effect until the applicant takes the oath of allegiance. The oath is now taken, and citizenship is conferred, at public ceremonies held in the locality of the applicant's place of residence, and presided over by the mayor or equivalent head of the local government authority.

The declaration of intention to apply for naturalisation, which was introduced by the original Act of 1948, is no longer compulsory, although it can still be made if an intending applicant so desires. This change was made by the amending Acts of 1955 and 1959 under the provisions of which aliens may lodge applications on completing 4½ years residence, but may not be granted naturalisation until five years' residence has been completed.

Under the Act the independence of married women in nationality matters is recognised, and British nationality was restored to those women who had lost it through marriage to aliens prior to 26 January 1949. Such women automatically became Australian citizens if they were born in Australia or had lived here for the five years prior to the commencement of the Act. Marriage does not affect a woman's nationality. Alien women who marry Australian citizens may, however, be naturalised under somewhat easier conditions than those which apply to other aliens.

Persons granted Australian citizenship by naturalisation and registration during 1967-68

The following tables show the previous nationalities and the countries in which persons were ordinarily resident immediately before entering Australia and New Guinea, of persons:

(*a*) who became Australian citizens by reason of the grant of certificates of naturalisation; and

(*b*) who became Australian citizens by reason of the grant of certificates of registration.

PERSONS GRANTED AUSTRALIAN CITIZENSHIP BY NATURALISATION, 1967-68

NATIONALITY

Albanian	33
Argentinian	14
Australian protected person	169
Austrian	755
Belgian	189
Bolivian	1
Brazilian	6
British protected person	6
Bulgarian	51
Burmese	56
Byelorussian	17
Chilean	3
Chinese	1,071
Cuban	3
Czechoslovak	152
Danish	174
Dutch	4,198
Estonian	87
Filipino	46
Finnish	409
French	152
German	3,630
Greek	5,958
Hungarian	1,190
Indonesian	46
Iranian	19
Iraqi	7
Israeli	292
Italian	10,012
Japanese	36
Jordanian	53
Korean	7
Latvian	245
Lebanese	441
Libyan	9
Lithuanian	124
Mexican	1
Moroccan	12
Norwegian	48
Peruvian	2
Polish	2,259
Portuguese	83
Romanian	111
Russian	744
Spanish	280
Stateless	420
Swedish	56
Swiss	181
Syrian	13
Thai	5
Tongan	3
Turkish	37
Ukrainian	295
United Arab Republic	169
United States American	151
Venezuelan	11
Vietnamese	5
Western Samoan	3
Yugoslav	4,396
Total	**38,946**

PERSONS GRANTED AUSTRALIAN CITIZENSHIP BY NATURALISATION, 1967–68

continued

COUNTRIES IN WHICH THESE PERSONS ORDINARILY RESIDED IMMEDIATELY BEFORE ENTERING AUSTRALIA OR NEW GUINEA

Aden	9
Albania	10
Algeria	1
Argentina	49
Austria	1,885
Barbados	1
Belgium	260
Brazil	53
Bulgaria	12
Burma	61
Cambodia	1
Canada	38
Ceylon	3
Chile	11
China	933
Colombia	3
Congo	6
Costa Rica	1
Cuba	10
Cyprus	2
Czechoslovakia	47
Denmark	186
Ecuador	6
Eritrea	6
Estonia	12
Ethiopia	16
Fiji	13
Formosa	1
Finland	388
France	441
Germany	5,610
Ghana	12
Greece	5,478
Guinea	1
Hong Kong	852
Hungary	434
Iceland	1
India	14
Indonesia	151
Iran	16
Iraq	7
Ireland	3
Israel	373
Italy	11,153
Jamaica	1
Japan	54
Jordan	56
Kenya	7
Korea	7
Kuwait	1
Laos	1
Latvia	24
Lebanon	431
Liberia	4
Libya	10
Lithuania	23
Luxembourg	1
Macao	16
Madeira	1
Malaysia	21
Malta	2
Mexico	2
Morocco	20
New Caledonia	15
New Hebrides	7
New Zealand	32
Nigeria	1
Norway	41
Ocean Island	2
Pakistan	2
Papua and New Guinea	191
Paraguay	1
Peru	3
Philippines	60
Poland	1,069
Portugal	54
Qatar	2
Reunion Island	1
Rhodesia	4
Romania	72
Saudi Arabia	2
Senegal	2
Singapore	25
Solomon Islands	2
South Africa	31
Spain	251
Sudan	3
Surinam	1
Sweden	102
Switzerland	292
Syria	16
Tahiti	2
Tanzania	8
Thailand	5
The Netherlands	4,059
Timor	4
Tonga	4
Tunisia	1
Turkey	63
Uganda	2
Ukraine	25
Union of Soviet Socialist Republics	37
United Arab Republic	683
United Kingdom and Colonies	255
United States of America	190
Venezuela	35
Vietnam	9
West Indies	1
West Irian	3
Western Samoa	3
Yugoslavia	2,021
Total	**38,946**

The numbers of persons affected by certificates of naturalisation granted in 1967–68 according to State or Territory of residence were as follows: New South Wales, 14,479; Victoria, 16,520; Queensland, 2,117; South Australia, 2,711; Western Australia, 1,678; Tasmania, 470; Northern Territory, 179; Australian Capital Territory, 518; New Guinea, 274; Total, 38,946.

PERSONS GRANTED AUSTRALIAN CITIZENSHIP BY REGISTRATION, 1967-68

NATIONALITY

Citizens of—	
Canada	45
Ceylon	333
Cyprus	208
Fiji	5
Ghana	1
India	592
Ireland	164
Jamaica	2
Kenya	1
Malaysia	139
Malta	302
Citizens of—	
New Zealand	135
Pakistan	28
Rhodesia	47
Singapore	36
South Africa	161
Trinidad and Tobago	4
United Kingdom and Colonies	4,478
British—country of citizenship other or not stated	322
Total	7,003

COUNTRIES IN WHICH THESE PERSONS ORDINARILY RESIDED IMMEDIATELY BEFORE ENTERING AUSTRALIA OR NEW GUINEA

Aden	1
Austria	2
Barbados	1
Bahrain	6
Belgium	3
Bengal	1
Bermuda	6
Bolivia	3
Borneo	1
Brazil	1
Burma	47
Canada	48
Ceylon	323
China	7
Congo	1
Cook Island	1
Cyprus	193
Czechoslovakia	1
Estonia	1
Fiji	71
France	1
Germany	8
Ghana	4
Greece	5
Honduras	1
Hong Kong	211
India	747
Indonesia	32
Iran	1
Ireland	122
Israel	11
Italy	13
Jamaica	11
Japan	6
Jordan	4
Kenya	37
Korea	1
Lebanon	1
Madagascar	1
Malawi	4
Malaysia	207
Malta	308
Mauritius	331
Nauru	1
New Hebrides	1
New Zealand	158
Nigeria	6
Pakistan	34
Papua and New Guinea	12
Philippines	2
Poland	1
Qatar	2
Rhodesia	58
Seychelles	8
Singapore	133
South Africa	162
South Arabia	1
Spain	2
Sudan	8
Sweden	1
Switzerland	5
Tahiti	3
Tanzania	16
Thailand	2
The Netherlands	17
Tonga	1
Trinidad and Tobago	10
Tunisia	2
Uganda	12
Union of Soviet Socialist Republics	3
United Arab Republic	129
United Kingdom and Colonies	3,389
United States of America	21
Venezuela	1
Vietnam	7
West Indies	6
Yugoslavia	1
Zambia	3
Total	7,003

Persons granted Australian citizenship by naturalisation, 1945 to 1968

The numbers of persons granted Australian citizenship by naturalisation from January 1945 to June 1968, according to previous nationality, are shown in the following table.

PERSONS GRANTED AUSTRALIAN CITIZENSHIP BY NATURALISATION JANUARY 1945 TO JUNE 1968

Former nationality	*Persons granted citizenship*
Albanian	1,133
Austrian	8,935
Belgian	717
Bulgarian	1,290
Chinese	5,684
Czechoslovak	11,337
Danish	2,364
Dutch	68,612
Estonian	6,011
Finnish	2,456
French	2,161
German	45,027
Greek	51,773
Hungarian	29,859
Indonesian	208
Israeli	4,062
Italian	133,954
Japanese	686
Latvian	17,927
Lebanese	4,838
Lithuanian	8,567
Norwegian	1,223
Polish	65,882
Portuguese	505
Romanian	3,009
Russian	10,436
Spanish	1,424
Stateless	15,008
Swedish	693
Swiss	1,846
Syrian	158
Turkish	323
Ukrainian	19,909
United Arab Republic	620
United States American	1,331
Yugoslav	40,439
Others	3,256
Total	573,663

Migrant integration

An integration programme operates to aid the social settlement of migrants into the Australian community. The programme includes the following activities.

English-language tuition is arranged by the Department of Immigration to assist migrants to overcome their language problems. The services provided include instruction in Europe, English-language classes on board ships travelling to Australia, and adult education classes within Australia which are also supplemented by television, radio and correspondence courses. A course of instruction on gramophone records which has been developed from the radio course is also available. Approximately 668,000 migrants have taken advantage of the English-language facilities. At 31 December 1968, 13,949 migrants were enrolled in 973 language classes throughout Australia and 7,266 students were enrolled to receive instruction through the correspondence lessons.

Field surveys are undertaken which embrace sociological research studies of migrant integration and furnish information on such questions as the habits and behaviour of migrants within the community, the practical difficulties they experience during the process of integration, their ability to understand and accept their obligations and responsibilities as members of the Australian community, and the attitude of the native-born to the migrant.

Qualified social workers are employed in most State Branches of the Department of Immigration and provide a social welfare counselling and referral service. Welfare Officers are also employed in several Branches as part of this service. Accommodation Advisory Officers are available to provide information to migrants in Melbourne and Sydney.

The Good Neighbour Movement operates as a voluntary organisation throughout Australia to assist in the integration of migrants. Membership of the movement is made up of hundreds of community organisations whose activities are co-ordinated by State Councils. The Commonwealth Government assists each Council financially through grants to cover administrative expenses.

Citizenship Conventions. The principal occasion for community and Government to meet together and discuss the major issues involved in the successful integration of the migrant population is provided by the Citizenship Conventions convened in Canberra from time to time by the Commonwealth Government. Delegates from a wide range of community organisations and from Commonwealth and State Governments participate. The subjects discussed relate not only to the integration of migrants but also to the concept of Australian citizenship and the role of immigration in Australia's development.

Population of External Territories

Ordinances of the individual External Territories under the control of Australia provide for a census of the population to be taken on the day prescribed for the taking of a census in the Commonwealth of Australia. The following table shows the population of the Territories of Christmas Island, Cocos (Keeling) Islands, Norfolk Island, Papua and the Trust Territory of New Guinea at the census of 30 June 1966 and as estimated at 30 June 1968.

POPULATION: EXTERNAL TERRITORIES, 30 JUNE 1966 AND 1968

	Census 30 June 1966			*Estimate 30 June 1968*
Territory	*Males*	*Females*	*Persons*	*Persons*
Christmas Island	2,154	1,232	3,386	3,524
Cocos (Keeling) Islands	375	309	684	622
Norfolk Island	563	584	1,147	1,440
Papua—				
Indigenous population	(*a*)310,153	(*a*)281,806	(*a*)591,959	631,047
Non-indigenous population	8,307	6,070	14,377	n.a.
Total, Papua	*318,460*	*287,876*	*606,336*	n.a.(*b*)
Trust Territory of New Guinea—				
Indigenous population	(*a*)810,154	(*a*)748,209	(*a*)1,558,363	1,677,274
Non-indigenous population	11,744	8,547	20,291	n.a.
Total, New Guinea	*821,898*	*756,756*	*1,578,654*	n.a.(*b*)

(*a*) The 1966 Census of Papua-New Guinea was the first to include the indigenous population, and was based upon a 10 per cent sample of rural villages in the two Territories. (*b*) The total population for Papua and New Guinea was 2,348,753 at 30 June 1968.

Further particulars concerning the indigenous populations of the Territories are given in the chapter The Territories of Australia.

International statistics of population

In the following tables the population, density, rate of growth, natural increase and masculinity are shown in respect of all countries which had an estimated population of at least one million persons in 1967, plus Papua. The source of these figures is the 1967 *Demographic Yearbook*, which is prepared and published by the Statistical Office of the United Nations. The tables include figures varying in reliability and accuracy, there being considerable variation in the quality of demographic statistics as between countries, but this information has been shown to provide some form of guide as to the magnitude and trend of population movements in overseas countries.

Where the information available to the Statistical Office of the United Nations relates to only part of the population of a country, the population characteristic (e.g. rate of growth), or vital statistics rate (e.g. marriages), has been omitted from the tables, and this is indicated by a footnote. For fuller particulars of the differences in the quality of the statistics and their reliability and for other qualifications, reference should be made to the detailed explanations contained in the *Demographic Yearbook* of the Statistical Office of the United Nations (*see* particularly Technical Notes on Statistical Tables and footnotes to the tables).

Population, rate of growth and density: world, continents and regions

The following table shows for the world, continents, and regions, estimated population in 1930, 1940, 1950, 1960, 1963, and 1967. The annual rate of increase (per cent), together with the average annual increase, during the period 1960–1967, is also shown. Population figures have been adjusted for under enumeration and errors in estimation. In preparing these figures, the Population Branch of the United Nations revises, from time to time, the estimates for previous years as new data become available, for example, from a census. The figures are estimates only, and as such are subject to a substantial margin of error.

POPULATION, DENSITY, AND RATE OF INCREASE FOR THE WORLD AND CONTINENTS—SELECTED YEARS

(*Source:* United Nations *Demographic Yearbook*, 1967)

	Population								*Density (persons per square mile)*
	Estimates of mid-year population (millions)						*Annual rate of increase 1960–67 (per cent)*	*Average annual increase 1960–67 (millions)*	
Continent and region	*1930*	*1940*	*1950*	*1960*	*1963*	*1967*			*1967*
World total	**2,070**	**2,295**	**2,517**	**3,005**	**3,175**	**3,420**	**1.9**	**59.3**	**65**
Africa	*164*	*191*	*222*	*278*	*297*	*328*	*2.4*	*7.1*	*28*
Western Africa	48	58	67	88	94	104	2.4	2.3	44
Eastern Africa	46	54	63	77	82	90	2.4	1.9	36
Northern Africa	39	44	53	66	71	79	2.6	1.9	23
Middle Africa	21	23	25	29	31	34	1.9	0.7	13
Southern Africa	10	12	14	18	19	21	2.4	0.4	21
America	*242*	*274*	*329*	*412*	*439*	*479*	*2.2*	*9.6*	*28*
Northern America	134	144	166	199	208	220	1.4	3.0	26
Latin America	108	130	163	213	231	259	2.9	6.6	34
Tropical South America	55	67	84	112	122	137	3.0	3.6	26
Middle America	22	27	35	48	53	61	3.4	1.9	62
Temperate South America	19	22	27	33	34	37	1.8	0.6	23
Caribbean	12	14	17	20	22	24	2.4	0.6	264
Asia	*1,120*	*1,244*	*1,381*	*1,660*	*1,760*	*1,907*	*2.0*	*35.3*	*179*
East Asia	591	634	684	794	827	877	1.4	11.9	194
Mainland region	501	533	563	654	680	720	1.4	9.4	168
Japan	64	71	83	93	96	100	1.0	1.0	699
Other East Asia	26	30	38	47	51	57	2.8	1.4	567
South Asia	529	610	697	866	933	1,030	2.5	23.4	168
Middle South Asia	371	422	479	588	634	698	2.5	15.7	267
South East Asia	127	150	173	219	236	262	2.6	6.1	150
South West Asia	31	38	45	59	63	70	2.6	1.6	41
Europe	*355*	*380*	*392*	*425*	*437*	*452*	*0.9*	*3.9*	*238*
Western Europe	108	113	123	135	140	146	1.1	1.6	383
Southern Europe	93	103	108	117	120	125	0.9	1.1	246
Eastern Europe	89	96	88	97	99	101	0.6	0.6	264
Northern Europe	65	68	73	76	78	80	0.7	0.6	127
Oceania	*10.0*	*11.1*	*12.7*	*15.8*	*16.8*	*18.1*	*2.0*	*0.33*	*5*
Australia and New Zealand	8.0	8.7	10.1	12.7	13.5	14.5	1.9	0.26	5
Melanesia	1.6	1.8	1.9	2.2	2.4	2.5	2.3	0.04	13
Polynesia and Micronesia	0.4	0.6	0.7	0.9	0.9	1.1	2.9	0.03	91
Union of Soviet Socialist Republics	*179*	*195*	*180*	*214*	*225*	*236*	*1.4*	*3.1*	*28*

Population, density, rate of growth, natural increase, and masculinity of selected countries

Certain details of the population of the more populous countries within continental groups are shown in the following table. As explained above, reference should be made to the detailed comments contained in the United Nations *Demographic Yearbook*, 1967, regarding geographical units used, boundaries of areas, reliability of estimates, etc.

POPULATION, DENSITY, RATE OF INCREASE, NATURAL INCREASE, AND MASCULINITY—SELECTED COUNTRIES

(*Source:* United Nations *Demographic Yearbook*, 1967)

				Natural increase		*Masculinity at latest census*	
Country	*Population mid-year 1967 (thousands)*	*Density 1967 (persons per square mile)*	*Annual rate of increase 1963–67 (per cent)*	*Year*	*Rate (per thousand population)*	*Year*	*Rate (number of males per 100 females)*
Africa—							
Nigeria	61,450	174	2.7	..	(*a*)	1963	102.0
United Arab Republic, Egypt	30,907	80	2.5	1967	25.0	1966	101.8
Ethiopia	23,457	49	1.8	..	(*a*)	..	(*a*)
South Africa	18,733	39	2.4	..	(*a*)	1960	101.1
Congo, Democratic Republic of	(*b*)16,353	18	2.2	1955–57	23.0	1955–58	(*b*)94.4
Sudan	14,355	16	2.8	1956	33.2	1956	102.2
Morocco	14,140	83	2.8	1962	27.4	1960	99.9
Algeria	12,540	13	2.9	1963	34.1	..	(*a*)
Tanzania—							
Tanganyika	11,820	34	2.9	1957	21–22	1967	95.1
Zanzibar	353	347	1.8	1958	9.0	1967	102.3
Kenya	9,948	44	3.0	1962	30.0	1962	98.1
Ghana	8,143	88	2.6	1960	23–28	1960	102.2
Uganda	7,934	88	2.5	1959	22.0	1959	100.9
Mozambique	7,124	23	1.2	1965	(*a*)	1960	91.8
Madagascar	6,350	28	..	1966	21.0	1966	96.8
Cameroon	5,470	31	2.2	..	(*a*)	..	(*a*)
Angola	5,293	10	1.4	1965	20.5	1960	103.7
Upper Volta	5,054	47	2.0	1960–61	18.0	1960–61	100.8
Mali	4,745	10	1.9	1960–61	31.0	..	(*a*)
Tunisia	4,560	73	2.3	1959	21.0	1966	103.6
Southern Rhodesia	4,530	31	3.1	1962	34.1	1962	(*b*)106.2
Malawi	4,130	91	2.5	1953	(*a*)	1966	90.5
Ivory Coast	4,010	31	2.3	1961	22.8	..	(*a*)
Zambia	3,947	13	3.1	1963	31.8	1963	(*b*)98.5
Guinea	3,702	39	2.5	1955	22.0	1955	(*b*)90.8
Senegal	3,670	49	2.5	1960–61	26.6	1960–61	97.1
Niger	3,546	8	2.7	1959–60	25.0	1959–60	94.3
Chad	3,410	8	1.5	1963–64	14.0	..	(*a*)
Burundi	3,340	311	2.0	1965	20.5	1965	97.5
Rwanda	(*b*)3,306	326	3.1	1957	38.3	..	(*a*)
Somalia	2,660	10	3.4	..	(*a*)	..	(*a*)
Dahomey	2,505	57	2.9	1961	28.0	1961	(*b*)96.1
Sierra Leone	2,439	88	1.5	..	(*a*)	1963	98.4
Libya	1,738	3	3.7	1964	21.0	1964	108.3
Togo	1,724	80	2.4	1961	26.0	1958–60	91.9
Central African Republic	1,459	5	2.8	1959–60	18.0	1959–60	(*b*)91.5
Liberia	1,110	26	1.9	..	(*a*)	1962	98.2
Mauritania	1,100	3	2.0	1964–65	17.0	1964–65	106.2
North America—							
United States of America	199,118	54	1.3	1967	8.5	1960	97.1
Mexico	45,671	60	3.5	1960–65	34.0	1960	99.5
Canada	20,441	5	1.9	1967	10.7	1966	100.9
Cuba	8,033	181	2.6	1960–65	26–27	1953	105.0
Guatemala	4,717	111	3.1	1960–65	28.0	1964	102.7
Haiti	4,581	427	2.0	1960–65	25–26	1950	94.5
Dominican Republic	3,889	207	3.6	1960–65	31–32	1960	101.6
El Salvador	3,151	381	3.7	1960–65	33.0	1961	97.1
Puerto Rico	2,697	785	1.7	1967	20.7	1960	98.0
Honduras	2,445	57	3.4	1960–65	32–33	1961	99.3
Jamaica	1,876	443	2.5	1960–65	31.0	1960	92.5
Nicaragua	1,783	36	3.7	1960–65	33–34	1963	97.5
Costa Rica	1,594	80	3.5	1960–65	36–37	1963	100.2
Trinidad and Tobago	1,030	513	2.4	1960–65	29–31	1960	98.8
South America—							
Brazil	85,655	26	3.0	1960–65	31.0	1960	99.7
Argentina	23,031	21	1.5	1960–65	14.0	1960	100.6
Colombia	19,191	44	3.2	1960–65	29–30	1964	97.1
Peru	12,385	26	3.1	1960–65	31–32	1961	98.9
Venezuela	9,352	26	3.5	1960–65	37–38	1961	103.3
Chile	8,935	31	2.1	1960–65	23–24	1960	96.1
Ecuador	5,508	49	3.4	1960–65	34–35	1962	99.9
Bolivia	3,801	8	1.4	1960–65	23.0	1950	96.2
Uruguay	2,783	39	1.2	1960–65	15–16	1963	99.0
Paraguay	2,161	13	3.1	1960–65	30–31	1962	97.2

For footnotes *see* next page.

POPULATION, DENSITY, RATE OF INCREASE, NATURAL INCREASE, AND MASCULINITY—SELECTED COUNTRIES—*continued*

Country	*Population mid-year 1967 (thousands)*	*Density 1967 (persons per square mile)*	*Annual rate of increase 1963–67 (per cent)*	*Natural increase*		*Masculinity at latest census*	
				Year	*Rate (per thousand population)*	*Year*	*Rate (number of males per 100 females)*
Asia—							
China (mainland) . . .	720,000	194	1.4	1957	23.0	1953	107.6
India	511,115	404	2.4	1963–64	25.5	1961	106.2
Indonesia	110,100	192	2.4	1962	21.6	1961	97.3
Pakistan	107,258	293	2.1	1965	31.0	1961	111.1
Japan	99,920	699	1.0	1967	12.6	1965	96.4
Philippines	34,656	300	3.5	1967	15.5	1960	101.8
Thailand	32,680	166	3.1	1964	33.1	1960	100.4
Turkey in Asia . . .	29,920	104	2.5	1966	27.0	..	(*a*)
Korea, Republic of. . .	29,784	782	2.6	1955–60	28.7	1966	101.3
Iran	26,284	41	3.1	..	(*a*)	1966	107.0
Burma	25,811	98	2.1	1955	15	1941	104.0
Vietnam (North) . . .	20,100	329	3.1	..	(*a*)	1960	93.4
Vietnam, Republic of . .	16,973	256	2.6	1965	21.3	..	(*a*)
Afghanistan	15,751	62	2.0	..	(*a*)	..	(*a*)
China, Republic of (Formosa) .	13,142	945	3.0	1967	23.0	1966	112.1
Korea (North) . . .	12,700	272	2.5	1960	28.0	..	(*a*)
Ceylon	11,741	464	2.6	1967	23.3	1963	108.2
Nepal	10,500	194	1.9	1961	20.3	1961	96.9
West Malaysia (Malaya) . .	8,580	168	3.0	1966	29.7	1957	106.5
Iraq	8,440	49	2.5	1966	13.9	1965	103.7
Saudi Arabia	6,990	8	1.7	..	(*a*)	..	(*a*)
Cambodia	6,415	91	2.2	1959	21.7	1962	100.7
Syria	5,600	78	2.9	1967	27.6	1960	105.6
Yemen	5,000	67	..	..	(*a*)	..	(*a*)
Hong Kong	3,834	9,604	2.3	1967	17.9	1966	102.9
Laos	2,770	31	2.5	1965	24	..	(*a*)
Israel	2,669	334	2.9	1966	19.2	1961	103.0
Lebanon	2,520	627	2.5	1967	26.6	..	(*a*)
Jordan	2,145	57	4.1	1959–63	31	1961	103.5
Singapore	1,956	8,720	2.5	1966	24.3	1957	111.7
Mongolia	1,170	3	3.2	1965	30.3	1963	100.4
Europe—							
Germany—							
Federal Republic of . .	57,699	603	1.0	1967	6.1	1961	89.4
Eastern	16,001	383	−0.2	1967	1.6	1964	84.1
West Berlin . . .	2,173	11,702	−0.0	1967	−6.7	1961	73.2
East Berlin . . .	1,081	6,946	0.4	1965	0.0	1964	77.8
United Kingdom . . .	55,068	585	0.6	1967	6.3	1961	93.6
Italy	52,334	451	0.8	1967	8.4	1961	94.0
France	49,890	236	1.0	1967	6.0	1962	94.6
Spain	32,140	166	0.8	1967	12.4	1960	94.2
Poland	31,944	264	1.0	1967	8.6	1960	93.7
Yugoslavia	19,958	202	1.2	1967	10.8	1961	95.1
Romania	19,287	210	0.6	1967	17.8	1966	96.0
Czechoslovakia . . .	14,305	290	0.6	1966	5.6	1961	95.2
Netherlands	12,597	971	1.3	1967	11.0	1960	99.2
Hungary	10,212	285	0.3	1967	3.8	1960	93.2
Belgium	9,581	813	0.8	1967	3.0	1961	95.8
Portugal	9,440	267	1.1	1967	11.1	1960	91.9
Greece	8,716	171	0.7	1967	10.2	1961	95.2
Bulgaria	8,309	194	0.7	1967	6.0	1965	99.9
Sweden	7,869	44	0.9	1967	5.4	1965	99.8
Austria	7,323	225	0.5	1967	4.4	1961	87.3
Switzerland	6,050	381	1.2	1967	8.7	1960	96.3
Denmark	4,839	290	0.8	1966	8.1	..	(*a*)
Finland	4,664	36	0.7	1967	7.1	1960	93.0
Norway	3,784	31	0.8	1967	8.8	1960	99.3
Ireland	2,899	106	0.4	1967	10.4	1966	101.1
Turkey in Europe . . .	2,790	306	2.9	..	(*a*)	..	(*a*)
Albania	1,965	176	2.8	1966	25.4	1960	105.6
Oceania—							
Australia	11,751	4	1.9	1967	10.7	1966	101.4
New Zealand	2,726	26	1.8	1967	14.0	1966	100.8
New Guinea (Trust Territory) .	1,600	18	1.3	..	(*a*)	1966	108.9
Papua	620	8	3.4	..	(*a*)	1966	111.3
U.S.S.R.—							
Union of Soviet Socialist Republics	235,543	28	1.2	1967	9.8	1959	81.9

(*a*) Not available or information relates to a segment of population only. (*b*) African population only.

CHAPTER 8

VITAL STATISTICS

The tables in this chapter are confined to the principal characteristics of vital statistics for Australia and relate, in the main, to the year 1968 for marriages and 1967 for births, deaths, and infant deaths. Comparisons have been restricted, in general, to the individual years 1964 to 1968 and the five-year periods 1941–45 to 1961–65, while age data have been shown in five-year groups. Comparisons over longer periods, together with more detailed figures such as single age particulars and cross-classifications of various characteristics, will be found in the annual bulletins, *Demography* and *Causes of Death.* Current information is published in the *Monthly Review of Business Statistics*, the *Quarterly Summary of Australian Statistics*, and a mimeographed series issued at intervals throughout the year on population and vital statistics.

For years before 1967 the statistics of births, deaths and marriages exclude particulars of full-blood Aborigines. Differences between the statistics now published and those formerly published which implied the exclusion of Aboriginal vital events cannot be taken as reliable statistics of births, deaths, or marriages among full-blood Aborigines, because in many areas no satisfactory administrative or other basis existed for distinguishing vital events among full-blood Aborigines from those among part-Aborigines or the rest of the population.

Vital statistics for the principal countries of the world are set out in International Vital Statistics at the end of this chapter.

Provisions for registration and compilation of statistics

In Australia vital statistics are compiled from information supplied for the registration of births, deaths, and marriages. Each State and Territory has an independent system of registration. Provisions for the civil registration of births, deaths, and marriages have been in force in Tasmania from 1839, in Western Australia from 1841, in South Australia from 1842, in Victoria from 1853, and in New South Wales and Queensland (then part of New South Wales) from 1856. Registration in the Territories is administered by the Commonwealth Government, registration having been taken over from South Australia in 1911 in respect of the Northern Territory and from New South Wales in 1930 in respect of the Australian Capital Territory. The authority responsible for the registration of births, deaths, and marriages occurring within his particular State or Territory is the Registrar-General (the Government Statist in Victoria) or the Principal Registrar.

Information concerning a birth is required to be supplied within 28 days in the Australian Capital Territory and the Northern Territory, 42 days in South Australia, and 60 days in other States. For the registration of a death the period allowed is 8 days in Tasmania, 10 days in South Australia, 14 days in Western Australia, Australian Capital Territory, and Northern Territory, 21 days in Victoria, and 30 days in New South Wales and Queensland.

The *Marriage Act* 1961–1966 came into operation on 1 September 1963, placing the marriage laws of all States, the mainland Territories and Norfolk Island on a uniform basis. Provision is made for the celebration of marriage by ministers of religion registered with the Registrar of Ministers of Religion appointed in each State and Territory by the Attorney-General, and by certain civil officers. In all cases the authorised celebrant is required to register particulars of the parties married with the appropriate registering authority in each State or Territory. The celebrant is requested to register a marriage as soon as practicable and in any case not later than fourteen days after the marriage.

Information is required in all States and Territories concerning what have been commonly known as 'stillbirths'. These are excluded from all the tables of births and deaths in this chapter and are included only in the special tables of stillbirths shown on page 182. The statistics of stillbirths shown relate to those, in several States, of at least seven months gestation or, in other States and the two Territories, the approximate equivalent of twenty-eight weeks. The statistics relate to periods up to the end of 1967. Compulsory registration was introduced in Western Australia in 1908, the Australian Capital Territory in 1930, New South Wales in 1935, South Australia in 1937, the Northern Territory in 1949, Victoria in 1953, Queensland in 1959 and Tasmania in 1967.

Legislation has been adopted in most States and in the Territories for the completion of a medical certificate of cause of perinatal death for children not born alive (equivalent terms—foetal death, stillbirth) and children dying within the first twenty-eight complete days of life. The purpose of this new certificate of cause of death is to make available additional information on the causes of such mortality, and it has originated from the endeavours of the medical profession and health authorities to seek further reduction of the loss of life at or around birth.

The medical certificate of cause of perinatal death came into use in Western Australia, the Australian Capital Territory, and the Northern Territory in 1963, in Tasmania and Queensland in 1967, in South Australia in 1968, and in New South Wales in 1969.

The period of gestation was 'at least twenty weeks' (or if not known, alternatively a weight of at least four hundred grammes) in the Australian Capital Territory and the Northern Territory from September 1963, in Tasmania from 15 March 1967, in Queensland from 1 October 1967, in South Australia and Western Australia from 1 January 1968, and in New South Wales from 1 January 1969.

The data for the compilation of vital statistics are obtained from registry records and dispatched, through the Statistical Office in each State and Territory, to the Commonwealth Statistician. The compilation and publication of vital statistics for Australia is one of the functions of the Commonwealth Statistician. The Deputy Commonwealth Statisticians compile and publish statistics relating to their respective States.

Marriages

Numbers of marriages and crude marriage rates

The numbers of marriages registered in each State and Territory in five-year periods from 1941–45 to 1961–65, and for each of the years 1964 to 1968, and crude marriage rates for the same periods are shown in the following tables. Annual averages for each five-year period from 1861 to 1950 were published in Year Book No. 39, page 575.

MARRIAGES(a): STATES AND TERRITORIES, 1941 TO 1968

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Annual average—									
1941–45 . .	28,506	19,450	10,563	6,517	4,668	2,097	71	109	71,981
1946–50 . .	30,162	20,453	10,666	6,581	5,205	2,529	114	181	75,891
1951–55 . .	28,483	20,007	10,171	6,290	5,232	2,539	146	234	73,102
1956–60 . .	28,432	20,422	10,254	6,517	5,145	2,573	190	321	73,854
1961–65 . .	31,788	23,262	11,437	7,514	5,768	2,700	248	533	83,250
Annual total—									
1964 . .	32,633	24,169	11,752	7,765	6,023	2,869	233	569	86,013
1965 . .	35,176	26,421	12,967	8,680	6,448	2,888	296	670	93,546
1966 . .	35,575	27,089	13,325	9,051	7,001	2,946	312	747	96,046
1967 . .	37,077	28,004	13,634	9,434	7,430	3,213	325	883	100,000
1968 . .	39,213	29,724	14,860	9,652	8,086	3,426	419	965	106,345

(a) Excludes particulars of full-blood Aborigines before 1967.

CRUDE MARRIAGE RATES(*a*): STATES AND TERRITORIES, 1941 TO 1968

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Average annual rate—									
1941–45	9.97	9.86	10.04	10.61	9.74	8.61	7.2	7.6	9.94
1946–50	9.90	9.72	9.41	9.87	10.01	9.56	9.4	9.4	9.77
1951–55	8.41	8.34	7.91	8.11	8.44	8.35	9.1	8.2	8.29
1956–60	7.70	7.50	7.14	7.26	7.36	7.69	8.6	7.5	7.50
1961–65(*b*)	7.86	7.64	7.27	7.42	7.43	7.49	8.1	7.3	7.63
Annual rate—									
1964(*b*)	7.95	7.78	7.34	7.50	7.55	7.87	7.0	7.1	7.73
1965(*b*)	8.43	8.35	7.94	8.16	7.91	7.85	8.4	7.6	8.25
1966(*b*)	8.40	8.41	8.01	8.29	8.36	7.93	8.3	7.7	8.31
1967	8.60	8.55	8.01	8.49	8.47	8.53	5.5	8.5	8.46
1968	8.94	8.93	8.57	8.57	8.88	8.96	6.7	8.6	8.83

(*a*) Number of marriages per 1,000 of mean population. Excludes particulars of full-blood Aborigines before 1967. (*b*) Recalculated from population figures revised in accordance with results of the census of 30 June 1966.

NOTE. In some instances rates are based on too few marriages to warrant calculation to the second decimal place.

The crude marriage rates for Australia and the more populous countries of the world are shown for the latest available year in International Vital Statistics at the end of this chapter.

Marriage rates based on marriageable population

As the marriage rates in some international tabulations are based on the unmarried population aged 15 years and over, the corresponding rates have been calculated for Australia for the ten census periods to 1965–67. The period in each case comprises the census year with the year immediately preceding and the year immediately following, and the figures are as follows.

PERSONS MARRYING, PER 1,000 OF UNMARRIED POPULATION(*a*): AUSTRALIA 1880-82 TO 1965-67

Period	*Rate(b)*	*Period*	*Rate(b)*
1880–82	48.63	1932–34	42.88
1890–92	44.04	1946–48	71.24
1900–02	42.14	1953–55	65.32
1910–12	50.12	1960–62	62.27
1920–22	55.97	1965–67	68.34

(*a*) Excludes full-blood Aborigines. (*b*) Average annual number of persons who married per 1,000 unmarried persons, including widowed and divorced, aged 15 years and over.

Age and marital status at marriage

Particulars of age at marriage in age groups, and previous marital status, of bridegrooms and brides in 1968 are given hereunder. There were 15.418 males under 21 years of age married during 1968, while the corresponding number of females was 44,507. At the other extreme there were 1,104 bridegrooms and 564 brides in the age group 65 years and over.

AGE AND MARITAL STATUS OF BRIDEGROOMS AND BRIDES AUSTRALIA, 1968

Age at marriage (years)	Bridegrooms				Brides			
	Bachelors	Widowers	Divorced	Total	Spinsters	Widows	Divorced	Total
Under 20 .	7,650	1	. .	7,651	29,733	9	5	29,747
20–24 . .	56,485	19	133	56,637	53,938	99	517	54,554
25–29 . .	22,140	77	902	23,119	8,663	202	1,205	10,070
30–34 . .	5,745	96	1,134	6,975	2,150	224	1,105	3,479
35–39 . .	2,246	175	1,070	3,491	814	298	1,019	2,131
40–44 . .	1,184	262	1,038	2,484	466	412	907	1,785
45–49 . .	575	364	815	1,754	334	534	695	1,563
50–54 . .	304	427	598	1,329	185	542	444	1,171
55–59 . .	200	443	383	1,026	113	439	196	748
60–64 . .	87	492	196	775	88	357	88	533
65 and over .	73	877	154	1,104	69	451	44	564
Total .	**96,689**	**3,233**	**6,423**	**106,345**	**96,553**	**3,567**	**6,225**	**106,345**

In the following table the proportional distribution of bridegrooms and brides according to previous marital status is shown in five-year periods from 1936–40 to 1961–65 and for each of the years 1964 to 1968.

MARITAL STATUS OF BRIDEGROOMS AND BRIDES: PROPORTIONAL DISTRIBUTION, AUSTRALIA(*a*), 1936 TO 1968

(Per cent)

	Bridegrooms				Brides			
Period	Bachelors	Widowers	Divorced	Total	Spinsters	Widows	Divorced	Total
1936–40. .	92.59	4.82	2.59	100.00	93.94	3.38	2.68	100.00
1941–45. .	91.44	4.77	3.79	100.00	92.11	3.93	3.96	100.00
1946–50. .	88.82	4.74	6.44	100.00	88.71	4.74	6.55	100.00
1951–55. .	88.77	4.63	6.60	100.00	88.04	4.81	7.15	100.00
1956–60. .	89.86	4.18	5.96	100.00	88.80	4.47	6.73	100.00
1961–65. .	90.55	3.68	5.77	100.00	90.04	3.87	6.09	100.00
1964 . .	90.78	3.53	5.69	100.00	90.30	3.74	5.96	100.00
1965 . .	91.01	3.35	5.64	100.00	90.70	3.49	5.81	100.00
1966 . .	90.83	3.34	5.83	100.00	90.69	3.45	5.86	100.00
1967 . .	90.79	3.27	5.94	100.00	90.61	3.50	5.89	100.00
1968 . .	90.92	3.04	6.04	100.00	90.79	3.35	5.85	100.00

(*a*) Excludes particulars of full-blood Aborigines before 1967.

The relative ages of bridegrooms and brides in 1968 are shown below in age groups of five years.

RELATIVE AGES OF BRIDEGROOMS AND BRIDES: AUSTRALIA, 1968

Age of bride-groom (years)	Total bride-grooms	Age of bride (years)							
		Under 15	15–19	20–24	25–29	30–34	35–39	40–44	45 and over
Under 20 .	7,651	3	6,266	1,345	34	3	. .	. .	. .
20–24 . .	56,637	1	19,660	34,837	1,926	170	31	10	2
25–29 . .	23,119	2	3,232	14,607	4,367	691	155	50	15
30–34 . .	6,975	. .	445	2,761	2,255	1,032	309	119	54
35–39 . .	3,491	. .	102	703	927	807	553	243	156
40–44 . .	2,484	. .	17	197	361	468	513	514	414
45–49 . .	1,754	. .	10	66	129	204	326	390	629
50–54 . .	1,329	. .	3	21	47	60	152	236	810
55–59 . .	1,026	. .	4	15	14	32	56	138	767
60–64 . .	775	. .	. .	. .	3	9	25	59	679
65 and over .	1,104	. .	2	2	7	3	11	26	1,053
Total brides	**106,345**	**6**	**29,741**	**54,554**	**10,070**	**3,479**	**2,131**	**1,785**	**4,579**

The average age at marriage of brides and bridegrooms has declined during recent years. The average ages, in years, of brides for each of the five years to 1968 were: 1964, 24.31; 1965, 24.09; 1966, 24.02; 1967, 24.03; and 1968, 23.90. The average ages, in years, of bridegrooms were: 1964, 27.58; 1965, 27.24; 1966, 27.10; 1967, 27.01; and 1968, 26.76. The difference in the average age at marriage between brides and bridegrooms is generally about three years, the difference in 1968 being 2.86 years.

Previous marital status

The following table shows the relative marital status of bridegrooms and brides in 1968.

MARITAL STATUS OF BRIDEGROOMS AND BRIDES AUSTRALIA, 1968

Marital status of bridegrooms	*Total bridegrooms*	*Marital status of brides*		
		Spinsters	*Widows*	*Divorced*
Bachelors . .	96,689	92,229	1,174	3,286
Widowers . .	3,233	925	1,506	802
Divorced. . .	6,423	3,399	887	2,137
Total brides .	**106,345**	**96,553**	**3,567**	**6,225**

Countries of birth of persons marrying

The following table shows the relative countries of birth of bridegrooms and brides married in 1968.

RELATIVE COUNTRIES OF BIRTH OF BRIDEGROOMS AND BRIDES AUSTRALIA, 1968

Country of birth of bridegroom	*Country of birth of bride*											
	Australia	*New Zealand*	*United Kingdom and Ireland*	*Germany*	*Greece*	*Italy*	*Malta*	*Netherlands*	*Yugoslavia*	*Other European*	*Other and unspecified*	*Total bridegrooms*
Australia . .	70,753	338	4,641	996	62	244	189	732	56	482	880	79,373
New Zealand .	702	73	75	14	..	2	..	8	1	8	21	904
United Kingdom and Ireland .	6,162	85	1,987	160	11	26	50	141	8	107	201	8,938
Germany . .	1,187	14	197	344	5	10	14	48	23	102	51	1,995
Greece . .	176	4	15	7	2,465	11	4	4	11	11	100	2,808
Italy . .	863	12	97	50	17	2,144	24	24	30	43	53	3,357
Malta . .	283	1	47	14	4	9	468	10	1	7	10	854
Netherlands .	1,068	16	146	35	3	7	14	291	3	30	51	1,664
Yugoslavia .	310	7	51	72	37	39	3	17	644	51	25	1,256
Other European	1,056	19	175	213	23	29	9	43	47	728	103	2,445
Other and unspecified .	1,382	43	168	58	91	28	16	37	11	60	857	2,751
Total brides	83,942	612	7,599	1,963	2,718	2,549	791	1,355	835	1,629	2,352	106,345

Occupation of bridegrooms

The distribution of the 106,345 bridegrooms for 1968 among classes of occupations was as follows: craftsmen, 34,761; administrative and clerical workers, 15,849; professional and technical workers, 12,053; labourers, 10,274; rural and mining workers 8,677; workers in transport and communication, 6,990; service, sport, and other workers, 8,868; sales workers, 6.551; persons not in the work force, 2,322.

Celebration of marriages

Under the provisions of the *Marriage Act* 1961–1966 marriages may be celebrated either by ministers of religion who are registered for that purpose with the Registrar of Ministers of Religion in each State or Territory, or by certain civil officers, in most cases district registrars. Most of the marriages are celebrated by ministers of religion. The registered ministers in 1968 belonged to more than fifty different denominations, some of which, however, have only very few adherents. The categories 'Ministers of other recognised denominations' and 'Other ministers' combine ministers of some of these denominations. The figures for 1968 are shown in the following table.

MARRIAGES IN EACH DENOMINATION: STATES AND TERRITORIES, 1968

									Australia	
Category of celebrant	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*No.*	*Proportion of total*
Ministers of religion—										
Recognised denominations—										
Church of England .	12,320	6,838	3,857	2,104	2,560	1,433	62	227	29,401	27.6
Roman Catholic . .	11,058	8,626	4,096	2,005	2,122	732	121	304	29,064	27.3
Methodist . . .	4,083	3,150	2,174	2,384	892	417	20	39	13,159	12.4
Presbyterian . . .	3,620	4,558	2,234	366	410	144	23	73	11,428	10.8
Orthodox . . .	1,163	1,458	95	202	71	10	17	25	3,041	2.9
Baptist	676	502	285	248	105	91	2	13	1,922	1.8
Lutheran . . .	191	287	348	488	53	7	13	12	1,399	1.3
Churches of Christ .	176	550	106	314	190	16	..	21	1,373	1.3
Congregational . .	277	364	125	321	128	39	52	..	1,306	1.2
Salvation Army . .	157	169	108	50	46	32	5	3	570	0.5
Jewry	167	244	4	3	7	..	..	..	425	0.4
Seventh-day Adventist .	130	66	59	17	42	14	1	..	329	0.3
Jehovah's Witnesses .	65	54	42	20	24	5	..	3	213	0.2
Church of Jesus Christ of Latter Day Saints .	58	40	29	14	15	13	..	1	170	0.2
Christian Brethren . .	46	27	47	19	5	23	..	..	167	0.2
Unitarians . . .	1	105	..	3	..	..	..	..	109	0.1
Assemblies of God .	14	10	46	12	5	2	..	..	89	0.1
Other recognised denominations . .	149	123	82	54	106	19	4	2	539	0.5
Other ministers . .	69	216	13	9	29	4	..	..	340	0.3
Total ministers . .	*34,420*	*27,387*	*13,750*	*8,633*	*6,810*	*3,001*	*320*	*723*	*95,044*	*89.4*
Civil officers . . .	4,793	2,337	1,110	1,019	1,276	425	99	242	11,301	10.6
Grand total . .	**39,213**	**29,724**	**14,860**	**9,652**	**8,086**	**3,426**	**419**	**965**	**106,345**	**100.0**
Proportion of total (per cent)—										
Ministers of religion . .	87.78	92.14	92.53	89.44	84.22	87.59	76.37	74.92	89.37	..
Civil officers . . .	12.22	7.86	7.47	10.56	15.78	12.41	23.63	25.08	10.63	..

Divorce

The number of dissolutions of marriage, nullities of marriage and judicial separations was 9,746 in 1967 and 10,789 in 1968. Further information may be found in the chapter Public Justice.

Fertility and reproduction

Natural increase has been a significant element of increase in the population of Australia for many years. The level of natural increase depends on the excess of births over deaths, and the relation between fertility and mortality determines the rate of reproduction or replacement of the population.

Number of live births and confinements

There are various methods of measuring the fertility of the population by relating the number of births to the numbers of the population. In each the basic data are, of course, the numbers of live births. The number of live births registered in Australia during 1967 is shown in the following table. The table shows also the number of confinements resulting in one or more live births. The figures exclude cases where the births were of stillborn children only.

LIVE BIRTHS AND CONFINEMENTS: STATES AND TERRITORIES, 1967

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
LIVE BIRTHS									
Single births	77,304	64,079	33,988	19,988	17,626	7,421	1,876	2,351	224,633
Twins	1,518	1,372	695	392	392	117	43	47	4,576
Triplets	19	30	9	6	5	9	2	3	83
Quadruplets	..	4	..	..	..	..	..	..	4
Males	40,407	33,529	17,854	10,402	9,322	3,870	1,009	1,287	117,680
Females	38,434	31,956	16,838	9,984	8,701	3,677	912	1,114	111,616
Total	**78,841**	**65,485**	**34,692**	**20,386**	**18,023**	**7,547**	**1,921**	**2,401**	**229,296**
STILLBIRTHS ASSOCIATED WITH MULTIPLE BIRTHS INCLUDED ABOVE									
Twins	28	10	5	2	12	1	3	1	62
Triplets	2	3	..	..	1	..	1	..	7
CONFINEMENTS RESULTING IN BIRTHS SHOWN ABOVE									
Nuptial	71,851	61,124	30,859	18,821	15,898	6,925	1,644	2,307	209,429
Ex-nuptial	6,233	3,658	3,482	1,366	1,932	558	256	69	17,554
Total	**78,084**	**64,782**	**34,341**	**20,187**	**17,830**	**7,483**	**1,900**	**2,376**	**226,983**

NOTE. Owing to the registration procedure adopted in some States, it is possible that in some cases where one child only of a multiple pregnancy was liveborn, the confinement has been treated as a single birth. However, the numbers of multiple births are not significantly affected. *See also* page 177.

The average annual number of live births in each State and Territory for each five-year period from 1941 to 1965 and the total number of live births for each year from 1964 to 1968 are given in the following table. Corresponding figures for each five-year period from 1861 to 1950 were published in Year Book No. 39, page 583.

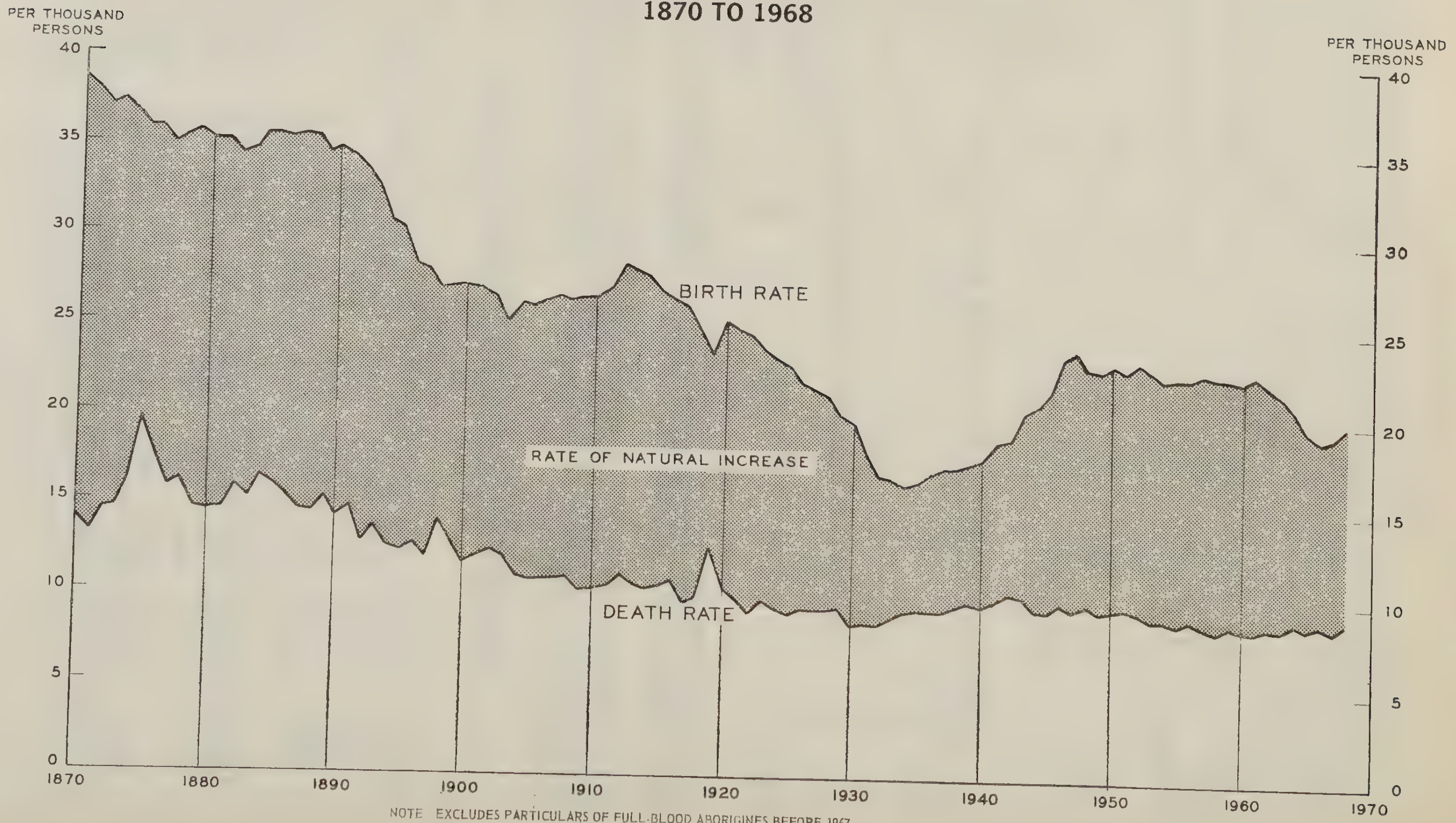
LIVE BIRTHS(*a*): STATES AND TERRITORIES, 1941 TO 1968

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Annual average—									
1941–45	56,583	38,002	23,431	12,546	10,409	5,418	113	384	146,886
1946–50	68,856	47,372	28,003	16,270	13,130	7,064	289	734	181,718
1951–55	73,737	53,770	30,983	18,045	15,724	7,774	468	922	201,423
1956–60	79,613	61,279	34,171	19,977	16,922	8,517	694	1,286	222,459
1961–65	82,896	65,193	35,357	21,377	16,861	8,439	897	1,932	232,952
Annual total—									
1964	80,518	64,990	34,972	20,866	16,685	8,252	911	1,955	229,149
1965	78,069	63,550	33,551	20,891	16,186	7,535	914	2,158	222,854
1966	77,758	64,008	32,843	20,319	17,007	7,401	972	2,318	222,626
1967	78,841	65,485	34,692	20,386	18,023	7,547	1,921	2,401	229,296
1968	81,696	70,228	35,190	21,207	19,541	8,317	2,084	2,643	240,906

(*a*) Excludes particulars of full-blood Aborigines before 1967.

RATES OF BIRTHS, DEATHS AND NATURAL INCREASE: AUSTRALIA

1870 TO 1968



NOTE EXCLUDES PARTICULARS OF FULL-BLOOD ABORIGINES BEFORE 1967

PLATE 20

Crude birth rates

The oldest and most popular method of measuring fertility is to relate the number of births to the total population, thus obtaining the crude birth rate. The crude birth rate measures the rate per thousand persons (irrespective of age or sex) at which the population has added to its numbers by way of births during a given period. Other methods of measuring fertility are shown on pages 172, 174–5. Crude birth rates for each five-year period from 1941 to 1965 and for each year from 1964 to 1968 are set out below for each State and Territory.

CRUDE BIRTH RATES(*a*): STATES AND TERRITORIES, 1941 TO 1968

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Average annual rates—									
1941–45	19.79	19.27	22.28	20.43	21.72	22.23	11.4	26.8	20.28
1946–50	22.60	22.51	24.69	24.41	25.24	26.71	23.8	37.9	23.39
1951–55	21.78	22.42	24.11	23.25	25.37	25.58	29.4	32.22	22.86
1956–60	21.55	22.52	23.80	22.27	24.20	25.45	31.49	30.10	22.59
1961–65(*b*)	20.49	21.42	22.49	21.11	21.71	23.41	29.30	26.31	21.34
Annual rates—									
1964(*b*)	19.61	20.93	21.84	20.16	20.93	22.64	27.6	24.3	20.60
1965(*b*)	18.71	20.08	20.54	19.63	19.85	20.48	25.8	24.4	19.65
1966(*b*)	18.35	19.87	19.74	18.62	20.31	19.92	25.9	24.0	19.27
1967	18.30	19.98	20.37	18.34	20.55	20.04	32.3	23.1	19.40
1968	18.62	21.10	20.30	18.83	21.47	21.76	33.3	23.4	20.00

(*a*) Number of births per 1,000 of mean population. Excludes particulars of full-blood Aborigines before 1967. (*b*) Recalculated from population figures revised in accordance with results of the census of 30 June 1966.

NOTE. In some instances rates are based on too few births to warrant calculation to the second decimal place.

The birth rates in the table above are based on *live births registered in the respective States and Territories*. Some confinements, however, take place in States other than the State in which the mother usually resides, particularly in areas near State borders. The variations thus caused in the birth rates for the States and Territories *by referring the birth registrations to the mother's usual residence* are shown by the following corrected rates for 1967—New South Wales, 18.32; Victoria, 19.96; Queensland, 20.35; South Australia, 18.28; Western Australia, 20.56; Tasmania, 20.07; Northern Territory, 33.3; and Australian Capital Territory, 23.3. *See* Year Book No. 47 (p. 339) for the effect of the variations in the availability of hospital facilities on the birth rate in the Australian Capital Territory and in the neighbouring town of Queanbeyan in New South Wales.

A graph showing the birth rate for each year from 1870 to 1968 will be found on page 170. The crude birth rates of Australia and the more populous countries of the world for the latest available year are shown in International Vital Statistics at the end of this chapter.

Fertility rates

The principal demographic factors affecting the level of crude birth rates are the proportion of women of child-bearing age in the population and the proportion of such women who are married. These factors may vary considerably at different periods and for different countries, and a population with a high proportion of married women of child-bearing age will have a higher crude birth rate than one with a low proportion, although the fertilities of the two populations may be identical. In order to compare fertilities, births are sometimes related to the number of women of child-bearing age or, alternatively, nuptial births are related to the number of married women of child-bearing age. Thus births are related to potential mothers, giving the fertility rate.

The following table sets out for certain periods, commencing with 1880–82, the number of births per thousand of mean population, the number of births per thousand women of child-bearing age and the number of nuptial births per thousand married women of child-bearing age. For purposes of this table the child-bearing age has been taken to be fifteen to forty-four years inclusive, but births to mothers who were stated to be under fifteen or over forty-four years have been included in the compilations.

CRUDE BIRTH RATES AND FERTILITY RATES: AUSTRALIA, 1880-82 TO 1965-67(*a*)

Period	*Average annual rates*			*Index Nos (Base: 1880–82 = 100)*		
		Fertility rates			*Fertility rates*	
	Crude birth rate(b)	*Births per 1,000 women aged 15–44 years*	*Nuptial births per 1,000 married women aged 15–44 years*	*Crude birth rate(b)*	*Births per 1,000 women aged 15–44 years*	*Nuptial births per 1,000 married women aged 15–44 years*
1880–82 . .	35.3	170	321	*100*	*100*	*100*
1890–92 . .	34.5	159	332	98	94	103
1900–02 . .	27.2	117	235	77	69	73
1910–12 . .	27.2	117	236	77	69	74
1920–22 . .	25.0	107	197	71	63	61
1932–34 . .	16.7	71	131	47	42	41
1946–48 . .	23.6	104	160	67	61	50
1953–55 . .	22.7	109	149	64	64	46
1960–62 . .	22.5	112	154	64	66	48
1965–67 . .	19.5	95	132	55	56	41

(*a*) Excludes particulars of full-blood Aborigines before 1965–67. (*b*) Number of births per 1,000 of mean population.

The table above shows how increasing proportions both of women of child-bearing age and of married women of child-bearing age inflate the crude birth rate. Thus, while the nuptial birth rate for married women increased by only 22 per cent over the period 1932–34 to 1946–48, the crude birth rate rose by 41 per cent owing principally to the greatly increased number of marriages during that period.

Age-specific birth rates

So long as customary ages at marriage do not change drastically the main demographic factor affecting the number of births is the age composition of the potential mothers in the population. Within the child-bearing group the fertility of women of different ages varies considerably, and a clearer view of the fertility of the population can be obtained from an examination of what are known as its age-specific birth rates, that is the number of births to women of specified ages per thousand women of those particular ages.

Age-specific birth rates are more commonly expressed in age groups than in single ages. In the following table such rates are shown in five-year age groups for Australia for the period 1941 to 1967. A graph on the following page shows the age-specific birth rates for each year during the period 1921 to 1967.

AGE-SPECIFIC BIRTH RATES(*a*): AUSTRALIA, 1941 TO 1967

Age group (years)	*1941*	*1946*	*1951*	*1956*	*1961*	*1965*	*1966*	*1967*
15–19 . .	24.27	26.13	38.62	42.99	47.35	47.52	48.89	48.37
20–24 . .	121.02	151.07	177.23	210.87	225.81	179.31	173.07	170.76
25–29 . .	143.46	183.18	185.32	203.04	221.21	188.54	183.88	184.97
30–34 . .	104.94	131.72	123.10	123.52	131.11	110.10	105.12	102.77
35–39 . .	57.82	78.29	65.03	64.20	63.38	53.00	50.62	47.85
40–44 . .	19.61	24.57	21.02	19.74	19.17	15.03	14.16	13.49
45–49 . .	1.67	2.10	1.61	1.58	1.41	1.11	1.04	1.09

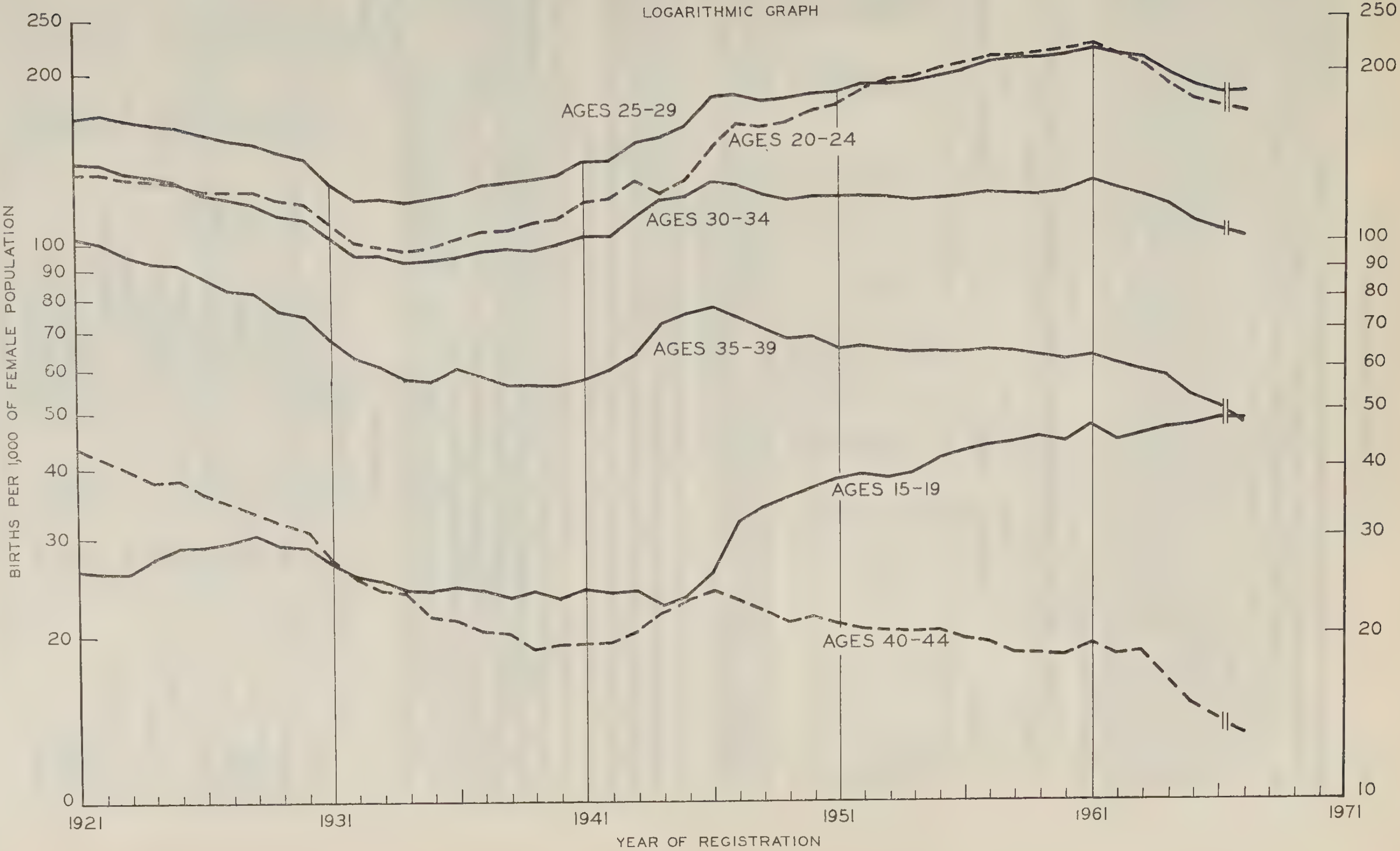
(*a*) Number of births per 1,000 women in each age group. Excludes particulars of full-blood Aborigines before 1967.

Gross and net reproduction rates for females

A single measure of reproduction, known as the gross reproduction rate, is obtained by adding together the specific fertility rates for each age in the child-bearing group. This measure indicates the number of female children who would be born on an average to women living right through the child-bearing period, if the conditions on which the rate is based continue. The rate is unaffected by the age composition of the potential mothers, and consequently it shows more clearly than the

1921 to 1967

(NUMBER OF BIRTHS PER 1,000 OF FEMALE POPULATION IN EACH AGE GROUP)



Note. (1) The vertical scale is logarithmic, and the curves rise and fall according to the rate of increase and decrease; actual numbers are indicated by the scale. (2) There is a break in continuity between 1966 and 1967. From 1967 the figures include Aborigines. Prior to 1967 birth registrations identified as those of full-blood Aborigines were excluded.

PLATE 21

crude birth rate the reproductive propensity of the population. It is, however, an imperfect measure of reproduction because it does not take into account the females who fail to live from birth to the end of the reproductive period. A more accurate measure of this nature is obtained by multiplying the specific fertility rates by the number of females in the corresponding age group of the stationary or life table population and summing the products. Allowance is thus made for the effect of mortality and the result is known as the net reproduction rate. The net reproduction rate indicates the average number of female children who would be born to women during their lifetime if they were subject at each age to the fertility and mortality rates on which the calculation is based. A constant net reproduction rate of unity indicates that the population will ultimately become stationary. If it continues greater than unity, the population will ultimately increase; if less than unity, it will ultimately decrease. The following table should be read in the light of the comment which follows it and of the index of marriage fertility, page 175.

GROSS AND NET REPRODUCTION RATES(*a*): AUSTRALIA, 1881 TO 1967

Year	*Gross reproduction rate*	*Net reproduction rate*
1881(*b*)	2.65	(*c*)1.88
1891(*b*)	2.30	(*c*)1.73
1901(*b*)	1.74	(*d*)1.39
1911	1.693	(*e*)1.395
1921	1.516	(*f*)1.317
1931	1.144	(*g*)1.043
1941	1.152	(*g*)1.092
1947	1.494	(*h*)1.416
1951	1.486	(*h*)1.428
1954	1.559	(*i*)1.499
1962	1.664	(*j*)1.609
1963	1.625	(*j*)1.572
1964	1.529	(*j*)1.480
1965	1.447	(*j*)1.400
1966	1.400	(*j*)1.355
1967	1.387	(*j*)1.342

(*a*) Excludes particulars of full-blood Aborigines before 1967. (*b*) Approximate only. (*c*) 1881–1890 mortality experience used. (*d*) 1891–1900 mortality experience used. (*e*) 1901–1910 mortality experience used. (*f*) 1920–1922 mortality experience used. (*g*) 1932–1934 mortality experience used. (*h*) 1946–1948 mortality experience used. (*i*) 1953–1955 mortality experience used. (*j*) 1960–1962 mortality experience used.

It is not strictly correct to assume, as in the calculations of the rates above, that a particular age-specific fertility rate can be applied to a hypothetical group of women reaching that age, without taking into account previous fertility and marriage experience. Reproduction rates are therefore unreliable when birth and marriage rates have been changing. The indexes of marriage fertility shown on the next page are also of doubtful reliability in similar circumstances.

In the following table a comparison is given of the gross and net reproduction rates recorded for various countries in the period 1954 to 1967. These represent the latest available international comparisons. The registration of vital events has not been fully established in many countries and consequently details for the calculation of reproduction rates are not available. In order that the table should be as representative as possible some countries have been included even though the gross reproduction rate is the only figure available.

GROSS AND NET REPRODUCTION RATES: VARIOUS COUNTRIES

Country	*Period*	*Reproduction rate*	
		Gross	*Net*
Venezuela	1963	3.04	2.69
Mauritius	1966	2.70	2.34
Malaya	1960	2.9	..
Ceylon	1961	2.5	..
Thailand	1954	2.26	1.70
Chile	1964	2.16	1.83
Ireland, Republic of	1966	1.86	1.81
New Zealand	1965	1.62	1.67
Canada	1966	1.37	1.33
United States of America	1966	1.33	1.29
Netherlands	1965	1.48	1.43
Portugal	1964	1.52	1.35
Scotland	1966	1.40	1.35
Norway	1965	1.41	1.37
France	1966	1.35	1.32
Australia	**1967**	**1.39**	**1.34**
England and Wales	1966	1.33	1.29
Belgium	1965	1.33	1.28
Yugoslavia	1965	1.32	..
Czechoslovakia	1964	1.22	1.17
Germany—			
Federal Rep.	1965	1.22	1.17
Democratic Rep.	1965	1.22	1.16
Sweden	1966	1.15	1.13
Switzerland	1965	1.23	1.19
Japan	1965	1.04	1.01
Hungary	1966	0.91	0.86

In comparing the reproduction rates of the countries shown allowance should be made for any differences in years, as the rates for any one country from year to year are affected by variations in the incidence of marriage, as well as the stationary or life table population used.

Fertility of marriages

More satisfactory estimates of the fertility of marriages may be made by relating nuptial births in each year to the marriages from which they could have resulted. Births to women of a certain number of years duration of marriage are related to the number of marriages taking place that number of years previously and the resulting rates are added to give a total for all durations. The table below sets out this index of current fertility per marriage in respect of births in the individual years shown.

FERTILITY OF MARRIAGES(*a*): AUSTRALIA, 1956 TO 1967

Year	*Nuptial births per marriage*	*Year*	*Nuptial births per marriage*	*Year*	*Nuptial births per marriage*
1956	2.58	1960	2.76	1964	2.58
1957	2.69	1961	2.84	1965	2.42
1958	2.69	1962	2.78	1966	2.32
1959	2.73	1963	2.72	1967	2.31

(*a*) Excludes particulars of full-blood Aborigines before 1967. For 1967, births of full-blood Aborigines resulting from tribal marriages have also been excluded, as particulars of tribal marriages are not available.

See text following first table on page 174.

The figure for a particular year gives the estimated number of children which a marriage would produce according to the fertility conditions of that year.

Births are omitted from the calculation if the marriage did not take place in Australia. Births which occur overseas to Australian marriages cannot be included and hence some understatement is present in the index. Furthermore the results do not take account of the previous reproductive history of a marriage or of age at marriage.

Masculinity of live births

The masculinity of live births, i.e., the number of males born for every 100 female births, has remained fairly stable for Australia at about 105. But when the number of births for which masculinity is being calculated is small (for example, totals for smaller States) considerable variation is shown. The averages for the ten years 1951–60 were as follows: New South Wales, 105.38; Victoria, 105.50; Queensland, 105.80; South Australia, 104.89; Western Australia, 105.25; Tasmania, 104.96; Northern Territory, 107.16; Australian Capital Territory, 108.77; Australia, 105.43. The following table shows the figures for Australia for each ten-year period from 1901 to 1960 and for each of the years 1966 to 1968.

MASCULINITY(*a*) OF LIVE BIRTHS REGISTERED: AUSTRALIA, 1901 TO 1968

	1901–10	*1911–20*	*1921–30*	*1931–40*	*1941–50*	*1951–60*	*1966*	*1967*	*1968*
Total births	105.22	105.27	105.55	105.12	105.38	105.43	105.95	105.43	105.41
Ex-nuptial births	104.08	105.25	105.16	105.36	105.34	103.99	103.91	106.16	104.21

(*a*) Number of males born for every 100 female births. Excludes particulars of full-blood Aborigines before 1967.

Ex-nuptial live births

The variations in the proportions of ex-nuptial live births as between the individual States and Territories for 1967 and for Australia at intervals from 1901 to 1967 are shown in the following table.

EX-NUPTIAL LIVE BIRTHS
NUMBER AND PROPORTION, STATES AND TERRITORIES, 1967

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Number .	6,300	3,699	3,525	1,375	1,944	562	259	70	17,734
Proportion of total births % . .	7.99	5.65	10.16	6.74	10.79	7.45	13.48	2.92	7.73

EX-NUPTIAL LIVE BIRTHS: NUMBER AND PROPORTION(*a*)
AUSTRALIA, 1901 TO 1967

	Annual average										
	1901–10	*1911–20*	*1921–30*	*1931–40*	*1941–50*	*1951–60*	*1963*	*1964*	*1965*	*1966*	*1967*
Number .	6,498	6,836	6,238	5,133	6,780	9,013	13,454	14,925	15,531	16,541	17,734
Proportion of total births % .	6.05	5.22	4.66	4.40	4.13	4.25	5.71	6.51	6.97	7.43	7.73

(*a*) Excludes particulars of full-blood Aborigines before 1967.

A further measure of ex-nuptiality is obtained by calculating the number of ex-nuptial births per thousand of the single, widowed and divorced female population aged from 15 to 44 years. On this basis, the number of ex-nuptial births per 1,000 unmarried women of ages 15 to 44 is as follows: 1880–82, 14.49; 1890–92, 15.93; 1900–02, 13.30; 1910–12, 12.53; 1920–22, 10.50; 1932–34, 6.91; 1946–48, 11.45; 1953–55, 14.45; 1960–62, 18.49; and 1965–67, 20.96. Particulars of full-blood Aborigines are excluded throughout. Ex-nuptial births to married women, which are not recorded separately, are included in these figures and it is not possible to determine to what extent they influence the trend shown. The following table shows the relative ratios of ex-nuptial and nuptial births to the total population for periods from 1901.

CRUDE EX-NUPTIAL, NUPTIAL, AND TOTAL BIRTH RATES(*a*)
AUSTRALIA, 1901 TO 1967

	Annual average								
Birth rate	*1901–10*	*1911–20*	*1921–30*	*1931–40*	*1941–50*	*1951–60*	*1965*	*1966*	*1967*
Ex-nuptial .	1.60	1.39	1.04	0.76	0.90	0.97	1.37	1.43	1.50
Nuptial .	24.91	25.18	21.40	16.47	20.99	21.75	18.28	17.84	17.90
Total .	**26.51**	**26.57**	**22.44**	**17.23**	**21.89**	**22.72**	**19.65**	**19.27**	**19.40**

(*a*) Number of births per 1,000 of mean population. Excludes particulars of full-blood Aborigines before 1967.

Legitimations

Under the provisions of the Commonwealth *Marriage Act* 1961–1966, which came into operation on 1 September 1963, a child whose parents were not married to each other at the time of its birth becomes legitimised on the subsequent marriage of its parents. The legitimation takes place whether or not there was a legal impediment to the marriage of the parents at the time of the child's birth and whether or not the child was still living at the time of the marriage, or in the case of a child born before 1 September 1963, at that date. Prior to the introduction of this Act, legitimations took place under Acts passed in the several States to legitimise children born before the marriage of their parents, provided that no legal impediment to the marriage existed at the time of birth. On registration in accordance with the provisions of the Legitimation Acts, any child who came within the scope of their purposes, born before or after the passing thereof, was deemed to be legitimate from birth by the post-natal union of its parents and entitled to the status of offspring born in wedlock. The number of children legitimised in Australia during 1967 was 3,059.

Multiple births

Because the current Australian birth statistics are based only on those confinements which resulted in a live-born child, the number of confinements for multiple births for Australia is understated—firstly, because in cases where all children of a multiple birth are stillborn the confinement is excluded, and secondly, because some cases of multiple births in which only one child was live born are registered as single births.

Multiple births recorded on this basis during 1967 comprised 2,319 cases of twins, 30 cases of triplets and one case of quadruplets, the resultant number of live born and stillborn children being respectively 4,576 and 62 for twins, 83 and 7 for triplets and 4 live born children for quadruplets. This represents an average of 10.22 recorded cases of twins and 0.13 recorded cases of triplets per 1,000 confinements or, alternatively, mothers of twins represented 1 in every 98 mothers and mothers of triplets 1 in every 7,566. Total cases of multiple births represented 10.35 per 1,000 confinements or 1 in every 97 mothers. The proportion of mothers of multiple births to total mothers does not vary greatly from year to year.

Confinements—ages of parents

The relative ages of the parents of children whose births were registered in 1967 have been tabulated separately for male and female births, multiple births being distinguished from single births. For confinements and for multiple births, the relative ages of parents are shown in *Demography*, Bulletin No. 85. In the following table the relative ages of parents are shown in five-year groups.

CONFINEMENTS, BY RELATIVE AGES OF PARENTS: AUSTRALIA, 1967

Age of father (years) and type of birth		*Total*	*Age of mother (years)*								
			Under 15	*15–19*	*20–24*	*25–29*	*30–34*	*35–39*	*40–44*	*45 and over*	*Not stated*
Under 20		3,760	5	3,165	580	9	1	..	..	..	..
20–24		41,472	2	11,527	27,515	2,306	104	17	..	..	1
25–29		69,738	6	2,485	33,557	30,984	2,485	193	26	1	1
30–34		48,392	3	450	7,588	24,071	14,612	1,538	126	4	..
35–39		28,120	5	113	1,552	6,734	11,809	7,278	611	16	2
40–44		12,450	1	26	331	1,383	3,274	5,172	2,194	69	..
45–49		3,806	1	10	91	296	668	1,381	1,213	146	..
50–54		1,189	..	2	39	89	170	394	420	74	1
55–59		336	..	3	17	33	48	101	113	21	..
60–64		85	1	3	5	7	16	29	21	3	..
65 and over(*a*)		81	..	2	13	11	16	19	14	1	5
Mothers of nuptial children	Single	207,265	23	17,653	70,700	65,262	32,729	15,881	4,675	332	10
	Twins	2,135	1	133	581	650	466	239	62	3	..
	Triplets	29	..	..	7	11	8	(*b*)2	1	..	..
	Total	*209,429*	*24*	*17,786*	*71,288*	*65,923*	*33,203*	*16,122*	*4,738*	*335*	*10*
Mothers of ex-nuptial children	Single	17,368	99	6,703	5,470	2,460	1,351	919	313	40	13
	Twins	184	2	42	48	35	36	21	..	..	..
	Triplets	2	..	1	..	1	..	..	..	..	..
	Total	*17,554*	*101*	*6,746*	*5,518*	*2,496*	*1,387*	*940*	*313*	*40*	*13*
Total mothers	Single	224,633	122	24,356	76,170	67,722	34,080	16,800	4,988	372	23
	Twins	2,319	3	175	629	685	502	260	62	3	..
	Triplets	31	..	1	7	12	8	(*b*)2	1	..	..
	Total	226,983	125	24,532	76,806	68,419	34,590	17,062	5,051	375	23

(*a*) Includes thirty-six confinements in which the age of the father was not stated. (*b*) Includes one case of quadruplets.

Confinements—countries of birth of parents

The following table shows the countries of birth of parents of children whose births from nuptial confinements were registered during 1967.

NUPTIAL CONFINEMENTS, BY RELATIVE COUNTRIES OF BIRTH OF PARENTS AUSTRALIA, 1967

	Country of birth of mother											
Country of birth of father	*Australia*	*New Zealand*	*United Kingdom and Ireland*	*Germany*	*Greece*	*Italy*	*Malta*	*Netherlands*	*Yugoslavia*	*Other European*	*Other and unspecified*	*Total fathers*
Australia	140,640	600	6,016	918	123	308	258	989	80	520	1,133	151,585
New Zealand	637	198	52	4	1	2	1	9	..	9	22	935
United Kingdom and Ireland	7,456	90	7,713	147	4	28	63	121	9	142	311	16,084
Germany	1,208	15	166	1,006	10	21	21	75	31	145	62	2,760
Greece	337	2	26	20	7,477	12	3	12	13	29	121	8,052
Italy	1,866	11	167	84	40	9,161	45	71	68	89	94	11,696
Malta	476	3	83	14	3	8	1,706	23	4	15	29	2,364
Netherlands	1,624	13	192	69	4	7	13	1,564	5	43	83	3,617
Yugoslavia	588	7	82	134	88	112	12	40	1,808	122	25	2,988
Other European	1,614	25	267	330	81	49	22	71	102	1,901	155	4,617
Other and unspecified	1,633	25	316	61	156	48	29	76	9	107	2,271	4,731
Total mothers	**158,049**	**989**	**15,080**	**2,787**	**7,987**	**9,756**	**2,173**	**3,051**	**2,129**	**3,122**	**4,306**	**209,429**

Confinements—occupations of fathers

In the 209,429 cases where nuptial confinements resulted in one or more live births, the classes of occupations of the fathers were distributed as follows; craftsmen, 67,633; administrative and clerical workers, 28,406; rural and mining workers, 24,669; labourers, 22,288; professional and technical workers, 21,222; workers in transport and communication, 17,457; service, sport and other workers, 13,538; sales workers, 13,326; persons not in the work force, 890.

Confinements—age, duration of marriage and issue of mothers

The total number of nuptial confinements resulting in live births in 1967 was 209,429, comprising 207,265 single births, 2,135 cases of twins, 28 cases of triplets and one case of quadruplets. The following tables relating to previous issue exclude the issue of former marriages and stillborn children. On the other hand, they include in some States children by the same father who were born to the mother prior to the marriage. Children born at the present confinement are included in the total issue shown.

The following table shows that in 1967 the duration of marriage of mothers of nuptial children ranged from less than one year to over 25 years and that the average family increased fairly regularly with the duration of marriage. The average issue of married mothers who bore children in 1967 was 2.38, compared with 2.42 in 1966, 2.48 in 1965, 2.56 in 1964 and 2.60 in 1963.

NUPTIAL CONFINEMENTS, BY DURATION OF MARRIAGE AND ISSUE OF MOTHERS AUSTRALIA, 1967

Duration of marriage	*Total married mothers*	*Total issue*	*Average issue*	*Duration of marriage*	*Total married mothers*	*Total issue*	*Average issue*
Under 1 year	30,845	31,676	1.03	15 years	2,178	10,929	5.02
1 year	25,143	31,638	1.26	16 "	1,897	10,106	5.33
2 years	26,142	42,183	1.61	17 "	1,373	7,478	5.45
3 "	23,507	45,102	1.92	18 "	1,067	6,125	5.74
4 "	19,105	42,614	2.23	19 "	894	5,128	5.74
5 "	15,494	39,765	2.57	20 "	715	4,379	6.12
6 "	13,044	37,416	2.87	21 "	434	2,844	6.55
7 "	10,436	33,170	3.18	22 "	282	1,824	6.47
8 "	8,441	28,645	3.39	23 "	142	970	6.83
9 "	7,081	25,717	3.63	24 "	119	909	7.64
10 "	5,768	22,294	3.87	25 years and over	160	1,195	7.47
11 "	4,891	19,956	4.08	Not stated	600	2,210	3.68
12 "	3,993	17,288	4.33				
13 "	3,119	14,123	4.53				
14 "	2,559	12,238	4.78	**Total**	**209,429**	**(a)497,922**	**2.38**

(a) Excludes one confinement in which the previous issue was not stated.

The following table shows the average number of children born to mothers of different ages.

NUPTIAL CONFINEMENTS: AVERAGE ISSUE OF MOTHERS, BY AGE(a) AUSTRALIA, 1911 TO 1967

Period	*Average issue of mothers aged—* Under 20 years	20–24 years	25–29 years	30–34 years	35–39 years	40–44 years	45 years and over	All ages
1911–20 .	1.21	1.75	2.61	3.74	5.11	6.69	8.16	3.25
1921–30 .	1.20	1.71	2.46	3.48	4.80	6.27	7.74	3.04
1931–40 .	1.20	1.68	2.30	3.19	4.41	5.89	7.40	2.71
1941–50 .	1.17	1.56	2.15	2.85	3.67	4.79	6.19	2.37
1951–60 .	1.23	1.71	2.42	3.12	3.84	4.63	5.57	2.51
1967 . .	1.22	1.66	2.39	3.29	4.07	4.82	5.86	2.38

(a) Excludes particulars of full-blood Aborigines before 1967.

A classification of mothers by age and previous issue is given for 1967 in the following table.

NUPTIAL CONFINEMENTS, BY AGE OF MOTHER AND PREVIOUS ISSUE AUSTRALIA, 1967

Previous issue	*Age of mother (years)* Under 20	20–24	25–29	30–34	35–39	40–44	45 and over	Total married mothers
0	14,431	37,523	17,391	4,517	1,806	436	(a) 23	76,127
1	3,041	23,919	22,105	7,215	2,341	552	(a) 29	59,202
2	314	7,446	15,810	8,737	3,185	720	34	36,246
3	23	1,899	6,867	6,153	3,051	717	(a) 40	18,750
4	1	404	2,448	3,311	2,175	683	(a) 48	9,070
5	. .	78	858	1,677	1,406	520	(b) 39	4,578
6	. .	16	303	817	893	367	(b) 37	2,433
7	. .	2	95	431	514	270	26	1,338
8	. .	. .	33	207	348	189	21	798
9	. .	. .	11	91	210	107	22	441
10 and over . .	. .	(d) 1	2	47	193	177	26	(c) 446
Total married mothers	**17,810**	**71,288**	**65,923**	**33,203**	**16,122**	**4,738**	**(d)345**	**209,429**

(a) Includes two confinements for which the age of the mother was not stated. (b) Includes one confinement for which the age of mother was not stated. (c) Includes one confinement for which the previous issue was not stated. (d) Includes ten confinements for which the age of mother was not stated.

Multiple births—previous issue of mothers

Of married mothers of twins in 1967, 632 had no previous issue either living or dead, 558 had one child previously, 415 had two previous issue, 233 three, 139 four, 61 five, 46 six, 20 seven, 12 eight, 12 nine, 1 ten, 3 eleven, and 3 twelve. Of the 28 cases of nuptial triplets and one case of quadruplets registered during 1967, 9 mothers had no previous issue, 3 had one, 8 had two, 5 had three, 3 had four, and 1 had six previous issue.

Nuptial first births

The following table shows the interval between marriage and first birth for periods since 1911. In cases of multiple births, the first live born child only is enumerated.

NUPTIAL FIRST BIRTHS, BY DURATION OF MARRIAGE(*a*): AUSTRALIA, 1911 TO 1967

Duration of marriage	Annual average					1966	1967
	1911–20	1921–30	1931–40	1941–50	1951–60		
	NUMBER OF NUPTIAL FIRST BIRTHS						
Under 8 months	9,312	10,351	10,677	8,822	11,796	20,038	19,735
8 months	1,562	1,530	1,417	2,104	2,144	1,882	1,855
9 ,,	3,517	3,253	2,668	4,298	4,673	3,546	3,344
10 ,,	2,877	2,907	2,202	3,447	3,947	3,092	2,962
11 ,,	2,018	2,152	1,836	2,896	3,287	2,518	2,469
Total under 1 year	*19,286*	*20,193*	*18,800*	*21,567*	*25,847*	*31,076*	*30,365*
1 year and under 2 years	8,563	10,133	10,595	17,762	18,463	18,574	19,139
2 years ,, ,, 3 ,,	2,626	3,369	4,319	8,028	7,937	10,077	11,537
3 ,, ,, ,, 4 ,,	1,230	1,743	2,214	4,361	4,373	5,619	6,348
4 ,, ,, ,, 5 ,,	700	941	1,205	2,569	2,632	2,988	3,321
5 ,, ,, ,, 10 ,,	980	1,446	1,766	3,936	4,262	4,237	4,311
10 ,, ,, ,, 15 ,,	168	240	289	501	721	710	784
15 years and over	42	55	55	94	144	181	187
Not stated	..	..	..	..	..	..	135
Total	**33,595**	**38,120**	**39,243**	**58,818**	**64,379**	**73,462**	**76,127**
	PROPORTION OF TOTAL NUPTIAL FIRST BIRTHS (Per cent)						
Under 8 months	27.72	27.15	27.21	15.00	18.32	27.28	25.93
8 months	4.65	4.01	3.61	3.58	3.33	2.56	2.44
9 ,,	10.47	8.53	6.80	7.31	7.26	4.82	4.39
10 ,,	8.56	7.63	5.61	5.86	6.13	4.21	3.89
11 ,,	6.01	5.65	4.68	4.92	5.11	3.43	3.24
Total under 1 year	*57.41*	*52.97*	*47.91*	*36.67*	*40.15*	*42.30*	*39.89*
1 year and under 2 years	25.49	26.58	27.00	30.20	28.68	25.28	25.14
2 years ,, ,, 3 ,,	7.82	8.84	11.01	13.65	12.33	13.72	15.15
3 ,, ,, ,, 4 ,,	3.66	4.57	5.64	7.41	6.79	7.65	8.34
4 ,, ,, ,, 5 ,,	2.08	2.47	3.07	4.37	4.09	4.07	4.36
5 ,, ,, ,, 10 ,,	2.92	3.79	4.50	6.69	6.62	5.77	5.66
10 ,, ,, ,, 15 ,,	0.50	0.63	0.73	0.85	1.12	0.97	1.03
15 years and over	0.12	0.15	0.14	0.16	0.22	0.24	0.25
Not stated	..	..	..	..	..	..	0.18
Total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

(*a*) Excludes particulars of full-blood Aborigines before 1967.

In 1967 the masculinity of nuptial first births was 105.74 and of total births 105.43.

A summary showing grouped ages and grouped durations of marriage of mothers of nuptial first-born children is given in the following table.

NUPTIAL FIRST BIRTHS, BY AGE OF MOTHER AND DURATION OF MARRIAGE
AUSTRALIA, 1967

Duration of marriage	*Age of mother (years)*								
	Under 20	*20–24*	*25–29*	*30–34*	*35–39*	*40–44*	*45 and over*	*Not stated*	*Total*
	NUMBER OF NUPTIAL FIRST BIRTHS								
Under 8 months . . .	10,464	7,733	1,083	277	136	40	1	1	19,735
8 months	376	1,022	315	100	35	7	..	..	1,855
9 „	522	1,929	604	219	60	10	..	..	3,344
10 „	442	1,763	534	147	60	15	1	..	2,962
11 „	380	1,458	426	145	51	8	1	..	2,469
Total under 1 year .	*12,184*	*13,905*	*2,962*	*888*	*342*	*80*	*3*	*1*	*30,365*
1 year and under 2 years	1,840	12,081	3,782	947	403	81	4	1	19,139
2 years „ „ 3 „	279	7,150	3,300	552	203	48	5	..	11,537
3 „ „ „ 4 „	41	3,016	2,751	388	118	33	1	..	6,348
4 „ „ „ 5 „	8	977	1,916	302	97	19	2	..	3,321
5 „ „ „ 10 „	1	359	2,619	995	258	78	1	..	4,311
10 „ „ „ 15 „	..	..	54	428	258	41	3	..	784
15 years and over . .	..	..	..	10	122	53	2	..	187
Not stated . . .	78	35	7	7	5	3	..	..	135
Total . . .	**14,431**	**37,523**	**17,391**	**4,517**	**1,806**	**436**	**21**	**2**	**76,127**

The following table provides a comparison between the numbers of nuptial first births and subsequent births in periods since 1911 and shows also the proportion of first to total nuptial confinements.

NUPTIAL FIRST BIRTHS AND SUBSEQUENT BIRTHS(*a*)
AUSTRALIA, 1911 TO 1967

Period	*Nuptial confinements*			*Proportion of first to total nuptial confinements (per cent)*
	First births	*Other births*	*Total*	
Annual average—				
1911–20 . . .	33,595	88,997	122,592	27.40
1921–30 . . .	38,120	88,086	126,206	30.20
1931–40 . . .	39,243	71,136	110,379	35.55
1941–50 . . .	58,818	96,994	155,812	37.75
1951–60 . . .	64,379	136,264	200,643	32.09
Annual total—				
1963 . . .	69,130	150,713	219,843	31.45
1964 . . .	68,586	143,437	212,023	32.35
1965 . . .	70,197	134,941	205,138	34.22
1966 . . .	73,462	130,499	203,961	36.02
1967 . . .	76,127	133,302	209,429	36.35

(*a*) Excludes particulars of full-blood Aborigines before 1967.

Stillbirths

Interstate comparisons of the figures and rates in the following tables are affected by the differences in the definitions of stillbirths adopted by the various States, and only the trends in the rates for the States should be compared. For various reasons, the registration of stillbirths is not as complete as for live births and deaths; particulars for the Territories and the smaller States are more affected by this than are those for the larger States. Stillbirth registration was not compulsory in Tasmania until 1967. The figures shown in the tables represent those stillbirths voluntarily registered during the year.

STILLBIRTHS(*a*): STATES AND TERRITORIES, 1936 TO 1967

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Annual average—									
1936–40	1,409	854	n.a.	(*b*)274	234	144	n.a.	5	n.a.
1941–45	1,478	966	(*c*)657	324	248	143	n.a.	9	*cd*3,825
1946–50	1,405	949	626	368	274	161	n.a.	12	(*d*)3,795
1951–55	1,239	849	581	290	271	139	8	16	3,393
1956–60	1,253	839	558	274	235	109	6	19	3,293
1961–65	1,104	794	468	264	194	87	17	18	2,946
Annual total—									
1963	1,163	792	476	262	178	63	30	14	2,978
1964	1,003	771	402	252	170	69	13	15	2,695
1965	947	747	391	256	181	89	15	23	2,649
1966	964	762	405	237	168	111	11	31	2,689
1967	863	797	372	211	188	83	(*e*)49	24	2,587

(*a*) Excludes particulars of full-blood Aborigines before 1967. (*b*) Three years 1938–40. (*c*) Figures for Queensland are not available for 1941. (*d*) Excludes Northern Territory. (*e*) Includes 25 foetal deaths occurring in remote localities for which the period of gestation was not stated. The Registration Ordinance requires registration of any foetal death of at least twenty weeks gestation.

The incidence of stillbirths in each State and Territory as measured by the rate per 1,000 of all births, both live and still, is as follows.

PROPORTION OF STILLBIRTHS(*a*)(*b*): STATES AND TERRITORIES, 1936 TO 1967

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Average annual rate—									
1936–40	28.7	27.4	n.a.	(*c*)27.5	25.7	28.7	n.a.	22.2	n.a.
1941–45	25.5	24.8	(*d*)26.8	25.2	23.3	25.7	n.a.	22.9	*de* 25.25
1946–50	20.0	19.6	21.9	22.1	20.5	22.3	n.a.	16.3	(*e*)20.46
1951–55	16.5	15.5	18.4	15.8	17.0	17.5	17.2	17.1	16.57
1956–60	15.5	13.5	16.1	13.5	13.7	12.6	8.6	14.3	14.59
1961–65	13.1	12.0	13.1	12.2	11.4	10.2	18.4	9.3	12.49
Annual rate—									
1963	13.6	11.9	13.1	12.1	10.2	7.3	33.7	(*f*)	12.48
1964	12.3	11.7	11.4	11.9	10.1	8.3	(*f*)	(*f*)	11.62
1965	12.0	11.6	11.5	12.1	11.1	11.7	(*f*)	10.5	11.75
1966	12.2	11.8	12.2	11.5	9.8	14.8	(*f*)	13.2	11.93
1967	10.8	12.0	10.6	10.2	10.3	10.9	24.9	9.9	11.16

(*a*) Numbers of stillbirths per 1,000 of all births (live and still). (*b*) Excludes particulars of full-blood Aborigines before 1967. (*c*) Three years 1938–40. (*d*) Figures for Queensland are not available for 1941. (*e*) Excludes Northern Territory. (*f*) Less than twenty events; rates not calculated.

NOTE. Because of the smallness of the numbers of stillbirths occurring in the Australian Capital Territory and the Northern Territory the rates for these Territories (i.e. the number per thousand live births and stillbirths) are subject to considerable fluctuation.

Mortality

Number of deaths

The following tables show the number of deaths, male and female, registered in each State and Territory during 1968. Stillbirths, although registered as both births and deaths in some States, are excluded from the death statistics published herein.

DEATHS, SEXES: STATES AND TERRITORIES, 1968

Sex	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Males	22,966	16,427	9,269	5,555	4,340	1,906	316	283	61,062
Females	18,837	13,540	6,809	4,361	3,130	1,378	227	205	48,487
Persons	**41,803**	**29,967**	**16,078**	**9,916**	**7,470**	**3,284**	**543**	**488**	**109,549**

A summary of the number of deaths in each State and Territory from 1941 to 1968 is given in the following table. Annual averages for each five-year period from 1861 to 1950 were published in Year Book No. 39, page 597.

DEATHS(*a*): STATES AND TERRITORIES, 1941 TO 1968

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Annual average—									
1941–45(*b*)	27,807	20,964	9,715	6,303	4,724	2,488	64	71	72,136
1946–50(*b*)	29,552	21,827	10,357	6,507	4,802	2,459	76	103	75,683
1951–55	32,135	22,900	11,187	7,182	5,263	2,576	109	131	81,483
1956–60	34,002	24,254	12,008	7,732	5,523	2,668	117	184	86,488
1961–65	37,514	26,569	13,570	8,388	6,043	2,939	152	290	95,465
Annual total—									
1963	37,226	26,920	13,275	8,201	5,976	2,818	161	317	94,894
1964	39,487	27,548	14,523	8,906	6,429	3,174	164	363	100,594
1965	38,949	28,031	14,114	8,788	6,274	3,043	161	355	99,715
1966	40,546	28,673	14,861	9,323	6,772	3,159	154	441	103,929
1967	39,613	28,373	14,736	9,071	6,779	3,228	527	376	102,703
1968	41,803	29,967	16,078	9,916	7,470	3,284	543	488	109,549

(*a*) Excludes particulars of full-blood Aborigines before 1967. (*b*) Excludes deaths of defence personnel and of internees and prisoners of war from overseas for the period September 1939 to June 1947.

Crude death rates

The commonest method of measuring the mortality rate is to relate the number of deaths for a given period to the mean population for that period, thus obtaining the crude death rate. This rate for a given period measures the number per thousand of population by which the population is depleted through deaths during that period.

CRUDE DEATH RATES(*a*): STATES AND TERRITORIES, 1941 TO 1968

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Average annual rate—									
1941–45(*b*)	9.73	10.63	9.24	10.26	9.86	10.21	6.4	5.0	9.96
1946–50(*b*)	9.70	10.37	9.13	9.76	9.23	9.30	6.3	5.3	9.74
1951–55	9.49	9.55	8.71	9.25	8.49	8.48	6.9	4.58	9.25
1956–60	9.20	8.91	8.36	8.62	7.90	7.97	5.32	4.31	8.78
1961–65	9.27	8.73	8.63	8.28	7.78	8.15	4.95	3.94	8.75
Annual rate—									
1964	9.61	8.87	9.07	8.61	8.06	8.71	5.0	4.5	9.04
1965	9.33	8.86	8.64	8.26	7.70	8.27	4.6	4.0	8.79
1966	9.57	8.90	8.93	8.54	8.09	8.50	4.1	4.6	8.99
1967	9.19	8.66	8.65	8.16	7.73	8.57	8.9	3.6	8.69
1968—									
Males	10.43	9.84	10.55	9.81	9.36	9.88	9.3	4.9	10.07
Females	8.62	8.16	7.96	7.79	7.01	7.27	8.0	3.7	8.11
Persons	**9.53**	**9.00**	**9.27**	**8.81**	**8.21**	**8.59**	**8.7**	**4.3**	**9.10**

(*a*) Number of deaths per 1,000 of mean population. Excludes particulars of full-blood Aborigines before 1967. (*b*) Excludes deaths of defence personnel, etc., from September 1939 to June 1947.

NOTE. Crude death rates (i.e. the number of deaths per thousand of mean population) are affected by the particular age and sex composition of the population. In the Australian Capital Territory and the Northern Territory the population at risk in the higher ages is lower proportionately than in other States, largely as a result of the rapid increases of the population in the lower ages. In some instances rates are based on too few deaths to warrant calculation to the second decimal place.

A graph showing the crude death rate for each year from 1870 to 1968 will be found on page 170.

Standardised death rates

The death rates quoted on page 183 are crude rates, i.e. they simply show the number of deaths per thousand of mean population without taking into consideration differences in the sex and age composition of the population. Other conditions being equal, however, the crude death rate of a community will be low if it contains a large proportion of young people (not infants), and conversely it will be relatively high if the population includes a large proportion of elderly people. The foregoing table of crude death rates, therefore, does not indicate comparative incidence of mortality either as between States in the same year or in any one State over a period of years. In order to obtain a comparison of mortality rates on a uniform basis as far as sex and age constitution are concerned, 'standardised' death rates may be computed. This is done by selecting a particular distribution of age and sex as a standard, and then calculating what would have been the general death rate if the death rates for each sex and in each age group had been as recorded, but the age and sex destribution had been the same as in the standard population. For the standardised rates which follow, the standard population compiled by the International Institute of Statistics has been used. This standard is based upon the age distribution according to sex of nineteen European countries at their censuses nearest to the year 1900. An examination of the age distribution of deaths and the resultant age-specific death rates is made on pages 188–90.

Comparison of crude and standardised death rates

The relative incidence of mortality as between individual States and as between the years 1921, 1933, 1947, 1954, 1961, and 1966 is illustrated in the following statement of crude and 'standardised' death rates. These years have been chosen for comparison because the census data give essential information as to sexes and ages of the State populations. Crude death rates are shown to indicate the degree to which they disguise the true position.

CRUDE AND STANDARDISED DEATH RATES: STATES, 1921 TO 1966

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
Crude death rate(*a*)—							
1921 . . .	9.50	10.52	9.37	10.02	10.42	10.30	9.91
1933 . . .	8.58	9.59	8.84	8.44	8.64	9.60	8.92
1947 . . .	9.53	10.44	9.15	9.61	9.39	9.17	9.69
1954 . . .	9.46	9.20	8.63	9.01	8.38	8.67	9.10
1961 . . .	8.95	8.37	8.41	8.06	7.77	7.89	8.47
1966 . . .	9.57	8.90	8.93	8.54	8.09	8.50	8.99
Standardised death rate(*b*)—							
1921 . . .	10.35	10.79	10.24	10.38	11.88	10.83	10.58
1933 . . .	8.52	8.74	9.10	7.66	8.74	8.86	8.62
1947 . . .	7.44	7.31	7.47	6.77	7.28	7.21	7.34
1954 . . .	7.24	6.63	6.80	6.52	6.71	7.02	6.90
1961 . . .	6.56	6.12	6.26	5.90	6.02	6.19	6.27
1966 . . .	6.84	6.42	6.34	6.18	6.25	6.47	6.53

(*a*) Total deaths per 1,000 of mean population. Excludes particulars of full-blood Aborigines. (*b*) *See* explanation of standardised death rates above.

The comparisons above relate to individual years in which a census of population was taken and should not be used as the basis for general conclusions as to changes in incidence of mortality for other than those years.

True death rates

The main objections to standardised death rates are that the choice of a standard population is arbitrary and that the standardised rates have little value except for comparative purposes, and even then variation of the standard population may make appreciable differences. However, a correct measurement of the mortality of the population can be obtained from life tables. A life table represents the number of survivors at each age from a group of newly-born children who are subject to given mortality conditions, and from such a table the complete expectation of life at birth can be calculated. The reciprocal of this figure is known as the true death rate, since, if the complete expectation of life of a person at birth is fifty years, say, then each person will on the average die fifty years after birth, so that in a stationary population one person in fifty or twenty per thousand, will die each year. The true death rate for a given period is unaffected by the particular age distribution of that period and is determined solely by the mortality experience of the period as manifested in the rate of survival from each year of age to the next. The table below sets out true death rates for the periods covered by Australian life tables together with estimates for recent years based on abridged life tables calculated by the Commonwealth Statistician. These estimates are subject to revision when the Australian life tables 1965–1967 become available.

TRUE DEATH RATES: AUSTRALIA
1881-90 TO 1967(*a*)

Period	*True death rate*	
	Males(*b*)	*Females*(*c*)
1881–90 . . .	21.19	19.67
1891–1900 . . .	19.58	18.26
1901–10 . . .	18.12	17.00
1920–22 . . .	16.91	15.80
1932–34 . . .	15.75	14.89
1946–48 . . .	15.14	14.16
1953–55 . . .	14.89	13.75
1960–62 . . .	14.72	13.48
1964(*d*) . . .	14.84	13.55
1965(*d*) . . .	14.77	13.48
1966(*d*) . . .	14.80	13.51
1967(*d*) . . .	14.76	13.43

(*a*) Excludes particulars of full-blood Aborigines before 1967. (*b*) Number of deaths per 1,000 males in stationary population. (*c*) Number of deaths per 1,000 females in stationary population. (*d*) Based on abridged life tables calculated by the Commonwealth Statistician. These tables are based on estimates of population by age, adjusted to take into account the 1966 census.

The crude death rates and the true death rates of Australia and the more populous countries of the world for the latest available year are shown in the table in International Vital Statistics at the end of this chapter.

Australian Life Tables

Life Tables prior to 1961. It has been the practice at each census from 1911 onwards to prepare Life Tables representative of the mortality experience of Australia. The mortality of the Australian population for the thirty years from 1881 to 1910 inclusive was investigated in 1911 by the Commonwealth Statistician. Tables were compiled for each State and for Australia as a whole in respect of each sex for each of the decennial periods 1881–90, 1891–1900 and 1901–10. These compilations furnished a comprehensive view of Australian mortality in respect of sex, time, and geographical distribution, and practically superseded all Life Tables prepared in Australia prior to 1911. In addition, mortality tables based on the experience for the whole of Australia for the ten years 1901–10 were prepared and published. At the census of 1921 Life Tables were prepared by the Commonwealth Statistician from the recorded census population and the deaths in the three years 1920 to 1922. In 1933, 1947 and 1954, Life Tables based on the census population and the deaths in the years 1932 to 1934, 1946 to 1948 and 1953 to 1955 respectively were compiled by the Commonwealth Actuary.

Life Tables of census of 1961. On the occasion of the 1961 Census the eighth Life Tables in the series were compiled by the Commonwealth Actuary. These were based on the population recorded at the census, adjusted to allow for variation in the net movement into Australia over the years 1960 to 1962, and deaths during these years. Full particulars of the data used, the method of construction and the tabulation of these Life Tables will be found in the report of the Commonwealth Actuary, which was published by the Commonwealth Statistician in 1966. This report also appears in Volume VIII of the detailed tables of the 1961 census. The main features of the tables, including comparisons with earlier Australian tables, are set out in the following summary tables.

AUSTRALIAN COMPARATIVE LIFE TABLES

RATES OF MORTALITY (q_x) AT REPRESENTATIVE AGES

Age (x)	*1901–10*	*1920–22*	*1932–34*	*1946–48*	*1953–55*	*1960–62*
MALES						
0	.09510	.07132	.04543	.03199	.02521	.02239
10	.00179	.00156	.00119	.00072	.00056	.00041
20	.00370	.00284	.00219	.00169	.00186	.00173
30	.00519	.00390	.00271	.00186	.00170	.00157
40	.00816	.00617	.00460	.00337	.00297	.00300
50	.01395	.01158	.00966	.00919	.00819	.00804
60	.02584	.02407	.02216	.02278	.02221	.02176
70	.06162	.05290	.05082	.05256	.05315	.05177
80	.13795	.13340	.12659	.12011	.11958	.11617
FEMALES						
0	.07953	.05568	.03642	.02519	.01989	.01757
10	.00159	.00127	.00087	.00050	.00035	.00028
20	.00329	.00252	.00183	.00091	.00064	.00060
30	.00519	.00387	.00279	.00165	.00096	.00082
40	.00718	.00524	.00402	.00284	.00217	.00187
50	.00956	.00808	.00744	.00641	.00530	.00464
60	.01920	.01571	.01466	.01360	.01203	.01074
70	.04777	.04090	.03802	.03607	.03250	.02933
80	.11333	.11230	.10106	.10027	.09314	.08507

q_x = probability of dying within one year at specified ages.

RATES OF MORTALITY FOR ONE PERIOD AS A PROPORTION OF THE RATES FOR THE PRECEDING PERIOD

	Males				*Females*			
	1932–34	*1946–48*	*1953–55*	*1960–62*	*1932–34*	*1946–48*	*1953–55*	*1960–62*
Age	*1920–22*	*1932–34*	*1946–48*	*1953–55*	*1920–22*	*1932–34*	*1946–48*	*1953–55*
0 . .	.64	.70	.79	.89	.65	.69	.79	.88
10 . .	.76	.61	.78	.73	.69	.57	.70	.80
20 . .	.77	.77	1.10	.93	.73	.50	.70	.94
30 . .	.69	.69	.91	.92	.72	.59	.58	.85
40 . .	.75	.73	.88	1.01	.77	.71	.76	.86
50 . .	.83	.95	.89	.98	.92	.86	.83	.88
60 . .	.92	1.03	.97	.98	.93	.93	.88	.89
70 . .	.96	1.03	1.01	.97	.93	.95	.90	.90
80 . .	.95	.95	1.00	.97	.90	.99	.93	.91

RATES OF MORTALITY AS A PROPORTION OF THE RATES FOR THE PERIOD 1901-1910

	Males				*Females*			
Age	$\frac{1932\text{–}34}{1901\text{–}10}$	$\frac{1946\text{–}48}{1901\text{–}10}$	$\frac{1953\text{–}55}{1901\text{–}10}$	$\frac{1960\text{–}62}{1901\text{–}10}$	$\frac{1932\text{–}34}{1901\text{–}10}$	$\frac{1946\text{–}48}{1901\text{–}10}$	$\frac{1953\text{–}55}{1901\text{–}10}$	$\frac{1960\text{–}62}{1901\text{–}10}$
0	.48	.34	.27	.24	.46	.32	.25	.22
10	.66	.40	.31	.23	.55	.31	.22	.18
20	.59	.46	.50	.47	.56	.28	.19	.18
30	.52	.36	.33	.30	.54	.32	.18	.16
40	.56	.41	.36	.37	.56	.40	.30	.26
50	.69	.66	.59	.58	.78	.67	.55	.49
60	.86	.88	.86	.84	.76	.71	.63	.56
70	.82	.85	.86	.84	.80	.76	.68	.61
80	.92	.87	.87	.84	.89	.88	.82	.75

NUMBER OF SURVIVORS (l_x) AT SELECTED AGES OUT OF 100,000 BIRTHS

	Males				*Females*			
Age (*x*)	*1901–10*	*1946–48*	*1953–55*	*1960–62*	*1901–10*	*1946–48*	*1953–55*	*1960–62*
0	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
10	86,622	95,619	96,488	97,062	88,395	96,549	97,228	97,664
20	84,493	94,562	95,460	96,215	86,459	95,953	96,774	97,278
30	80,844	92,967	93,801	94,726	82,909	94,740	96,055	96,649
40	75,887	90,823	90,861	92,859	78,001	92,758	94,715	95,481
50	68,221	85,946	87,553	88,473	71,945	89,011	91,573	92,713
60	56,782	74,251	76,256	77,456	63,247	81,257	84,665	86,537
70	38,275	52,230	54,054	54,944	46,793	65,398	69,613	72,505
80	14,330	22,785	23,658	24,669	21,356	35,401	39,633	43,453
90	1,652	3,144	3,507	3,800	3,566	6,556	8,087	10,005

COMPLETE EXPECTATION OF LIFE ($^{\circ}e_x$) AT SELECTED AGES

	Males				*Females*			
Age (*x*)	*1901–10*	*1946–48*	*1953–55*	*1960–62*	*1901–10*	*1946–48*	*1953–55*	*1960–62*
0	55.20	66.07	67.14	67.92	58.84	70.63	72.75	74.18
10	53.53	59.04	59.53	59.93	56.38	63.11	64.78	65.92
20	44.74	49.64	50.10	50.40	47.52	53.47	55.06	56.16
30	36.52	40.40	40.90	41.12	39.33	44.08	45.43	46.49
40	28.56	31.23	31.65	31.84	31.47	34.91	35.99	36.99
50	21.16	22.67	22.92	23.13	23.69	26.14	27.03	27.92
60	14.35	15.36	15.47	15.60	16.20	18.11	18.78	19.51
70	8.67	9.55	9.59	9.77	9.96	11.14	11.62	12.19
80	4.96	5.36	5.47	5.57	5.73	6.02	6.30	6.68

l_x = number surviving at specified ages out of 100,000 births. $^{\circ}e_x$ = complete expectation of life at specified ages.

As indicated in the foregoing tables, the progress towards lower mortality rates for both males and females has continued over the past sixty years or more. For example, the probability of a child born in 1961 dying in one year is less than one-quarter of the probability of death in one year attached to the child who was born sixty years ago. Even at advanced ages, the reductions which have occurred in mortality rates as compared with sixty years ago are very substantial. With the exception of males of ages forty to forty-seven and ages sixty-two to sixty-six lower mortality rates were experienced by males and females during 1960 to 1962 than for the period 1953 to 1955.

There is evidence that female longevity continues to improve at a faster rate than male longevity. It would seem that the risks associated with child-bearing for females are far out-weighed by the greater accident propensity of younger males and the more rapid deterioration of health of older males.

An improvement has occurred in male mortality from accidents of all types, although there is some indication that for females the accident rates have deteriorated slightly. The rates for females are, nevertheless, still substantially below the corresponding rates for males.

Age distribution at death

Age at death is recorded for statistical purposes in days for the first week of life, in weeks for the first four weeks, in months for the first year and in completed years of life thereafter. These ages are usually combined in groups for publication, the most common being weeks for the first four weeks, months or groups of months for the first year, single years of age for the first five years, and thereafter the five-year groups 5–9 years, 10–14 years, etc. A summary in this form for the year 1967 is given for Australia in the following table.

DEATHS, BY AGE AT DEATH AND SEX: AUSTRALIA, 1967

Age at death	*Males*	*Females*	*Persons*	*Age at death*	*Males*	*Females*	*Persons*
Under 1 week	1,601	1,115	2,716	5– 9 years	268	189	457
1 week and under 2 weeks	96	73	169	10–14 „	236	128	364
2 weeks and under 3 weeks	52	39	91	15–19 „	698	264	962
3 weeks and under 4 weeks	46	31	77	20–24 „	806	275	1,081
				25–29 „	609	262	871
Total under 4 weeks	*1,795*	*1,258*	*3,053*	30–34 „	597	306	903
				35–39 „	907	486	1,393
4 weeks and under 3 months	229	156	385	40–44 „	1,560	901	2,461
3 months and under 6 months	204	186	390	45–49 „	2,232	1,311	3,543
6 months and under 12 months	193	166	359	50–54 „	3,279	1,905	5,184
				55–59 „	4,860	2,379	7,239
				60–64 „	6,055	3,031	9,086
Total under 1 year	*2,421*	*1,766*	*4,187*	65–69 „	7,227	4,141	11,368
				70–74 „	7,576	5,919	13,495
1 year	195	177	372	75–79 „	7,817	7,299	15,116
2 years	111	95	206	80–84 „	5,683	6,902	12,585
3 „	95	54	149	85 years and over	4,203	7,341	11,544
4 „	61	57	118	Age not stated	12	7	19
Total under 5 years	*2,883*	*2,149*	*5,032*	**Total all ages**	**57,508**	**45,195**	**102,703**

There are different mortality rates at various stages of life, and the actual number of deaths in any period is related to the numbers living at the respective stages. Changes in the number of deaths from one period to another are associated with changes in the rate of mortality in the various age groups and by the changed proportions of persons living in the different groups. The combined effect of various influences, i.e. the steady decline in the rate of mortality, the long term decline in the birth-rate, and the effects of past and present migration on the age distribution of the population, is shown in the following table, which shows the proportion of deaths in various age groups in ten-year periods from 1901 to 1960 and for the year 1967.

PROPORTION OF DEATHS IN EACH AGE GROUP: AUSTRALIA, 1901 TO 1967(a)
(Per cent)

Age at death (years)	*1901–10*	*1911–20*	*1921–30*	*1931–40*	*1941–50*	*1951–60*	*1967*		
							Males	*Females*	*Persons*
Under 1 year	20.51	16.66	13.09	7.40	6.79	5.59	4.21	3.91	4.08
1– 4	6.45	6.09	4.51	2.56	1.71	1.33	0.80	0.85	0.82
5–14	3.71	3.47	3.00	2.29	1.34	1.04	0.88	0.70	0.80
15–24	6.22	5.10	4.33	3.61	2.09	1.71	2.62	1.19	1.99
25–34	7.31	7.40	5.92	4.49	2.87	2.30	2.10	1.26	1.73
35–44	8.39	8.02	7.72	6.25	4.52	4.00	4.29	3.07	3.75
45–54	9.29	10.34	9.99	10.34	9.15	8.29	9.58	7.12	8.50
55–64	9.74	12.12	14.82	15.11	16.67	15.81	18.98	11.97	15.90
65–74	13.39	13.51	17.85	22.53	23.09	25.47	25.74	22.26	24.21
75 and over	14.99	17.29	18.77	25.42	31.77	34.46	30.80	47.68	38.23
Total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

(a) Excludes particulars of full-blood Aborigines before 1967.

A table showing these proportions for males and females separately for the period 1901 to 1950 was published in Year Book No. 39, page 614.

Age-specific death rates

In previous issues of the Year Book, average annual age-specific death rates, i.e. the average number of deaths per 1,000 of population in each age group, were given for each State and Australia for the periods 1932–1934, 1946–1948, 1953–1955, and 1960–1962 (*see* Year Books, No. 37, pp. 778–9, No. 39, pp. 615–6, No. 44, pp. 640–1, and No. 52, p. 253). These rates were based on the age distribution of the population at the relevant censuses.

Rates for the period 1965–1967 are shown in the following table.

AGE-SPECIFIC DEATH RATES(*a*): STATES, 1965-67

Age group (years)	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
			MALES				
Under 1(*b*)	21.9	18.7	20.0	20.2	22.2	17.7	20.5
1–4	1.0	0.9	1.3	1.0	1.2	0.9	1.0
5–9	0.4	0.4	0.5	0.5	0.5	0.5	0.4
10–14	0.4	0.4	0.5	0.6	0.4	0.6	0.5
15–19	1.3	1.2	1.6	1.2	1.2	1.7	1.3
20–24	1.7	1.6	1.9	1.3	1.6	2.0	1.7
25–29	1.6	1.3	1.6	1.3	1.5	1.5	1.5
30–34	1.6	1.6	1.9	1.1	1.8	2.1	1.6
35–39	2.6	2.2	2.8	2.2	2.3	2.0	2.4
40–44	4.0	3.6	4.1	3.3	3.4	3.6	3.8
45–49	6.3	5.9	6.5	5.7	5.3	6.3	6.1
50–54	11.1	10.1	10.8	9.6	9.2	9.5	10.4
55–59	18.3	15.9	16.7	15.9	16.1	16.8	16.9
60–64	29.5	27.1	25.4	26.7	25.4	27.9	27.5
65–69	45.1	45.4	39.7	40.6	41.4	42.3	43.4
70–74	69.8	67.9	60.1	63.8	63.5	69.4	66.5
75–79	104.1	103.6	90.0	91.2	96.5	92.3	99.3
80–84	149.5	152.7	129.6	138.9	146.4	145.8	145.5
85 and over	244.9	251.6	226.2	228.3	247.7	234.4	241.7
			FEMALES				
Under 1(*b*)	15.8	15.7	16.7	15.3	17.8	14.5	16.0
1–4	0.8	0.7	1.0	0.7	0.8	0.9	0.8
5–9	0.4	0.3	0.3	0.3	0.3	0.4	0.3
10–14	0.3	0.2	0.3	0.3	0.2	0.4	0.3
15–19	0.5	0.6	0.5	0.4	0.4	0.6	0.5
20–24	0.7	0.6	0.7	0.5	0.6	0.7	0.6
25–29	0.7	0.7	0.9	0.5	0.7	0.7	0.7
30–34	1.0	1.0	1.1	0.9	0.8	1.1	1.0
35–39	1.7	1.2	1.9	1.1	1.4	1.3	1.5
40–44	2.5	1.9	2.7	2.1	2.1	2.7	2.3
45–49	4.1	3.6	4.4	3.3	3.3	3.6	3.8
50–54	6.4	5.4	6.4	5.0	5.3	4.8	5.8
55–59	9.4	8.2	8.8	7.6	7.6	8.6	8.6
60–64	14.5	13.4	12.6	12.9	12.5	13.9	13.5
65–69	22.7	22.2	20.1	20.5	20.7	23.3	21.8
70–74	38.5	38.6	34.0	35.1	34.6	38.3	37.2
75–79	64.2	62.5	58.8	60.9	57.8	69.0	62.3
80–84	111.6	104.4	99.3	101.2	100.6	114.7	107.6
85 and over	204.6	202.7	183.4	183.9	182.8	213.0	197.6

(*a*) Average annual number of deaths per 1,000 of population in each age group at 30 June 1966 based on 1966 census results adjusted for mis-statement of age. Includes particulars of Aborigines. (*b*) Infant deaths per 1,000 live births registered.

The following table shows age-specific death rates, for Australia for the year 1967, for males and females.

AGE-SPECIFIC DEATH RATES(*a*): AUSTRALIA, 1967

Age group (years)	*Males*	*Females*	*Age group (years)*	*Males*	*Females*
Under 1(*b*)	20.6	15.8	45–49	6.3	3.8
1– 4	1.0	0.8	50–54	10.1	5.9
5– 9	0.4	0.3	55–59	17.1	8.6
10–14	0.4	0.2	60–64	27.3	13.5
15–19	1.3	0.5	65–69	43.7	21.1
20–24	1.7	0.6	70–74	65.8	36.4
25–29	1.5	0.7	75–79	97.6	60.5
30–34	1.6	0.9	80–84	145.3	104.3
35–39	2.3	1.3	85 and over	230.9	195.2
40–44	3.9	2.4			

(*a*) Average number of deaths per 1,000 of the estimated mid-year population in each age group. (*b*) Infant deaths per 1,000 live births registered.

Infant deaths and death rates—States and Territories

The next table shows for each State and Territory for the period 1941 to 1968, the number of deaths under one year of age and the rates of infant mortality under one year. Rates for Australia and the more populous countries of the world for the latest available year are shown in the table International Vital Statistics at the end of this Chapter.

INFANT MORTALITY UNDER ONE YEAR(*a*): STATES AND TERRITORIES, 1941 TO 1968

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Annual average—									
1941–45	2,034	1,311	804	413	347	213	7	7	5,136
1946–50	1,990	1,129	770	431	370	187	11	14	4,902
1951–55	1,852	1,113	730	407	384	184	17	14	4,701
1956–60	1,770	1,205	717	410	362	176	25	18	4,683
1961–65	1,685	1,168	696	407	350	156	28	34	4,524
Annual total—									
1964	1,634	1,098	673	397	328	166	30	41	4,367
1965	1,492	1,109	598	385	351	125	23	34	4,117
1966	1,490	1,116	581	356	329	108	19	46	4,045
1967	1,452	1,101	678	346	313	130	122	44	4,186
1968	1,525	1,010	716	345	397	143	101	45	4,282
Annual average rate(*b*)—									
1941–45	35.9	34.5	34.3	32.9	33.3	39.3	61.7	18.7	34.97
1946–50	28.9	23.8	27.5	26.5	28.1	26.5	37.4	19.9	26.98
1951–55	25.1	20.7	23.6	22.6	24.4	23.7	36.3	15.4	23.34
1956–60	22.2	19.7	21.0	20.5	21.4	20.6	36.0	13.7	21.05
1961–65	20.3	17.9	19.7	19.0	20.8	18.5	31.2	17.6	19.42
Annual rate(*b*)—									
1964	20.3	16.9	19.2	19.0	19.7	20.1	32.9	21.0	19.06
1965	19.1	17.5	17.8	18.4	21.7	16.6	25.2	15.8	18.47
1966	19.2	17.4	17.7	17.5	19.3	14.6	(*c*)	19.8	18.17
1967	18.4	16.8	19.5	17.0	17.4	17.2	63.5	18.3	18.26
1968	18.7	14.4	20.3	16.3	20.3	17.2	48.5	17.0	17.77

(*a*) Excludes particulars of full-blood Aborigines before 1967. (*b*) Number of deaths of children aged under one year per 1,000 live births registered. (*c*) Less than twenty events; rate not calculated.

Because of the smallness of the numbers of these deaths occurring in the Australian Capital Territory and the Northern Territory, the rates for these Territories (i.e. number of such deaths per thousand live births) are subject to considerable fluctuation.

1911 TO 1965-67

NUMBER OF DEATHS PER 1,000 MALES OR FEMALES IN EACH AGE GROUP

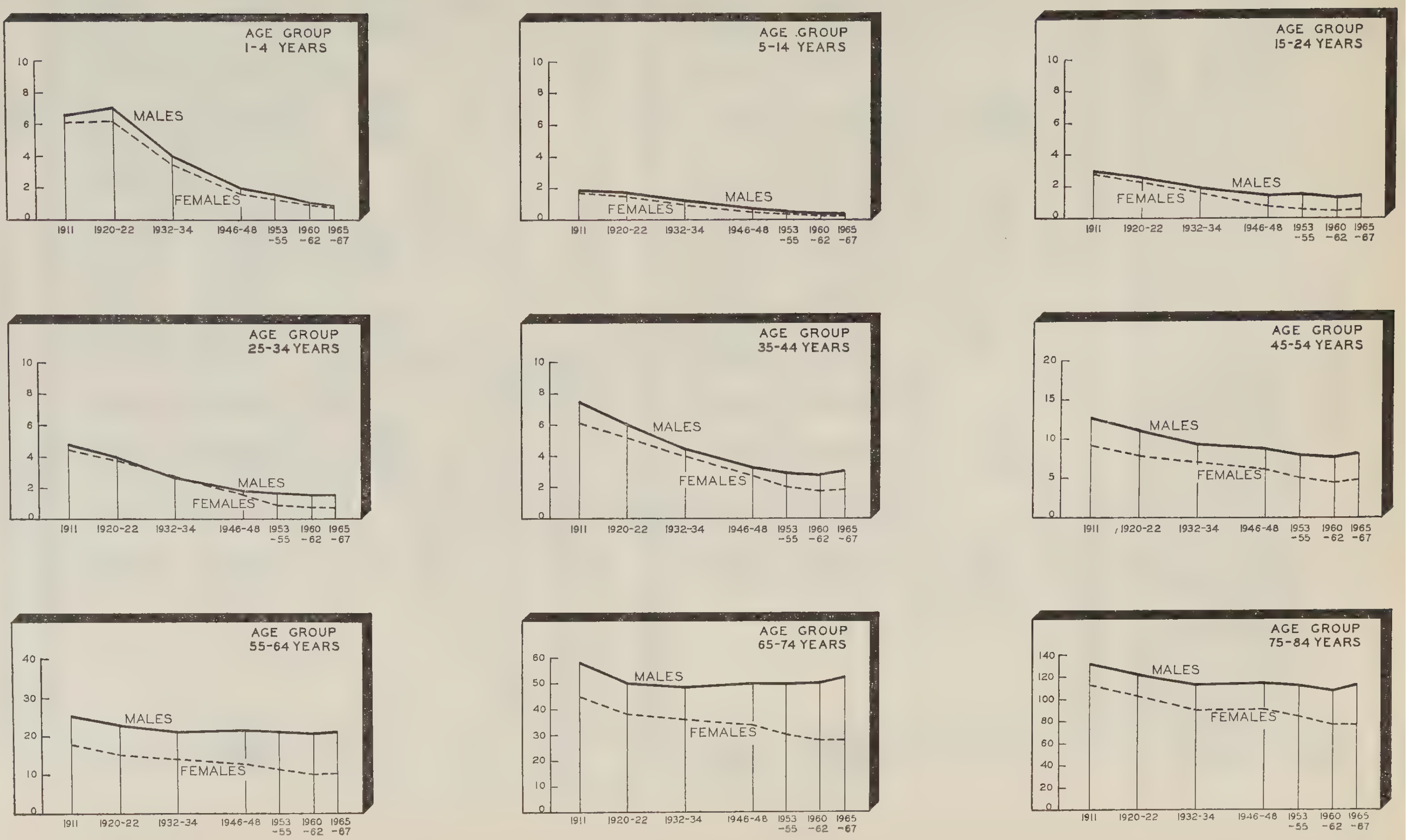


PLATE 22

Infant deaths and death rates—Australia

The fact that out of 585,874 male infants born from 1963 to 1967, 12,250 (20.91 per 1,000) died during the first year of life, while of 553,740 female infants only 9,073 (16.38 per 1,000) died during the first year, accords with the universal experience that during the first few years of life the higher death rate of male infants tends to counteract the excess of male births. Stillbirths, for which masculinity is also higher, are not included in any of the tables relating to deaths.

As shown by the following table, the disparity is greater during the first four weeks of life, termed the neonatal period, than during the remainder of the first year of life, or the post-neonatal period.

INFANT DEATHS AND MORTALITY RATES, BY SEX: AUSTRALIA, 1936 TO 1967(*a*)

Period	*Number of deaths*						*Rates(b)*					
	Neonatal—under four weeks		*Post-neonatal—four weeks and under one year*		*Total under one year*		*Neonatal—under four weeks*		*Post-neonatal—four weeks and under one year*		*Total under one year*	
	Males	*Females*	*Males*	*Females*	*Males*	*Females*	*Males*	*Females*	*Males*	*Females*	*Males*	*Females*
	ANNUAL AVERAGES						AVERAGE ANNUAL RATES					
1936–40 . . .	1,816	1,353	863	663	2,679	2,016	29.30	22.93	13.93	11.23	43.23	34.16
1941–45 . . .	2,007	1,495	914	720	2,921	2,215	26.66	20.88	12.14	10.05	38.80	30.93
1946–50 . . .	2,024	1,490	784	604	2,808	2,094	21.68	16.86	8.40	6.84	30.08	23.70
1951–55 . . .	1,907	1,406	776	612	2,683	2,018	18.47	14.32	7.52	6.24	25.99	20.56
1956–60 . . .	1,921	1,432	741	589	2,662	2,021	16.81	13.24	6.48	5.45	23.29	18.69
1961–65 . . .	1,887	1,373	709	555	2,596	1,928	15.75	12.13	5.92	4.90	21.67	17.03
	ANNUAL TOTALS						ANNUAL RATES					
1963	1,946	1,429	690	542	2,636	1,971	16.06	12.48	5.70	4.73	21.76	17.21
1964	1,795	1,331	713	528	2,508	1,859	15.20	11.98	6.04	4.75	21.24	16.73
1965	1,704	1,243	653	517	2,357	1,760	14.89	11.47	5.70	4.77	20.59	16.24
1966	1,686	1,241	642	476	2,328	1,717	14.72	11.48	5.61	4.40	20.33	15.88
1967	1,795	1,258	626	508	2,421	1,766	15.25	11.27	5.32	4.55	20.57	15.82

(*a*) Excludes particulars of full-blood Aborigines before 1967. (*b*) Number of deaths per 1,000 male or female live births registered.

From the following table, showing particulars of infant deaths in the first four weeks of life, or the neonatal period, it will be seen that for both males and females the risk of death is very much greater during the first day of life than subsequently.

INFANT DEATHS AND MORTALITY RATES—UNDER FOUR WEEKS, BY SEX
AUSTRALIA, 1936 TO 1967(*a*)

Period	*Number of deaths*						*Rates(b)*					
	Early neonatal				*Late neonatal—one week and under four weeks*		*Early neonatal*				*Late neonatal—one week and under four weeks*	
	Under one day		*One day and under one week*				*Under one day*		*One day and under one week*			
	Males	*Females*	*Males*	*Females*	*Males*	*Females*	*Males*	*Females*	*Males*	*Females*	*Males*	*Females*
	ANNUAL AVERAGES						AVERAGE ANNUAL RATES					
1936–40 . . .	n.a.	n.a.	*c*1,496	*c*1,120	320	233	n.a.	n.a.	*c*24.13	*c*18.99	5.17	3.94
1941–45 . . .	906	674	728	541	373	280	12.03	9.42	9.67	7.55	4.96	3.91
1946–50 . . .	986	731	758	539	280	220	10.56	8.28	8.12	6.09	3.00	2.49
1951–55 . . .	918	713	742	508	247	185	8.88	7.26	7.19	5.17	2.40	1.89
1956–60 . . .	972	765	705	490	244	177	8.50	7.07	6.17	4.53	2.13	1.64
1961–65 . . .	986	723	691	496	210	154	8.23	6.39	5.77	4.38	1.75	1.36
	ANNUAL TOTALS						ANNUAL RATES					
1963	1,043	765	691	509	212	155	8.61	6.68	5.70	4.44	1.75	1.36
1964	940	719	691	479	164	133	7.96	6.47	5.85	4.31	1.39	1.20
1965	889	655	615	452	200	136	7.77	6.04	5.37	4.17	1.75	1.25
1966	853	658	660	447	173	136	7.45	6.09	5.76	4.14	1.51	1.26
1967	908	664	693	451	194	143	7.72	5.95	5.89	4.04	1.65	1.28

(*a*) Excludes particulars of full-blood Aborigines before 1967. (*b*) Number of deaths per 1,000 male or female live births registered. (*c*) Includes under one day.

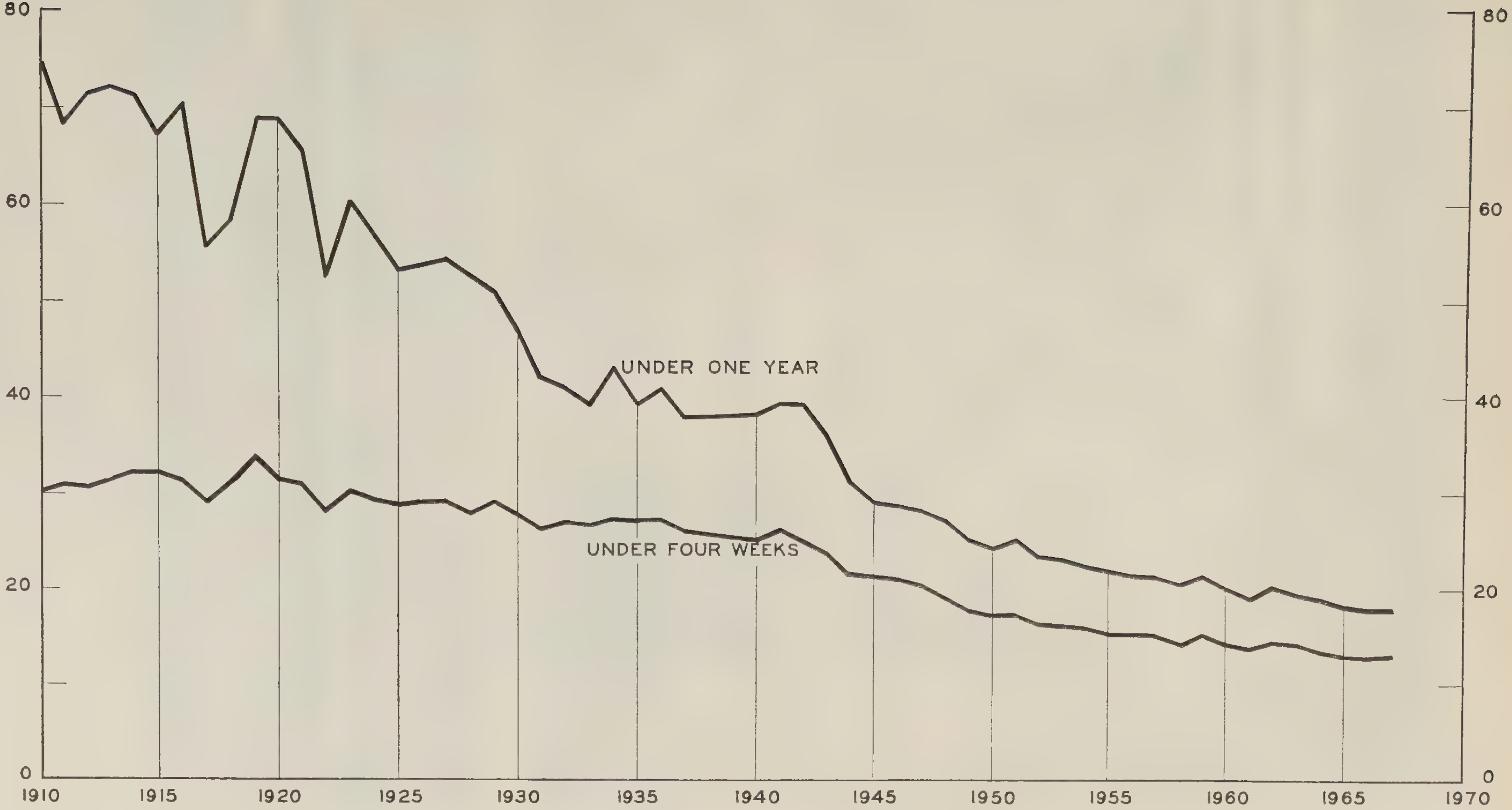
The graph opposite shows infant mortality rates for each year from 1910 to 1967.

PLATE 23

INFANT MORTALITY RATES: AUSTRALIA

1910 TO 1967

(INFANT DEATHS PER 1,000 LIVE BIRTHS)



NOTE. EXCLUDES PARTICULARS OF FULL-BLOOD ABORIGINES BEFORE 1967

Causes of death—children under one year

Causes of death of children under one year of age should be considered in relation to age at death, because the emphasis on various causes changes rapidly as age at death varies. A summary for 1967 of deaths of children under one year of age, classified according to principal causes of death and age at death, is given in the following table.

DEATHS OF CHILDREN UNDER ONE YEAR OF AGE, BY CAUSE OF DEATH AUSTRALIA, 1967

International Classification of Diseases number	*Cause of death*	*Age at death*										
		Days		*Total under one week*	*Weeks*			*Months*				*Total under one year*
		Under 1	*1–6*		*1*	*2*	*3*	*1–2 (a)*	*3–5*	*6–8*	*9–11*	
	Causes mainly of prenatal and natal origin—											
750–759	Congenital malformations	156	181	337	68	32	34	123	68	31	19	712
760, 761	Birth injury	313	215	528	12	5	3	1	..	..	..	549
762	Postnatal asphyxia and atelectasis	340	209	549	12	2	2	1	2	3	..	571
769	Attributed to certain diseases of the mother	39	41	80	2	..	1	2	2	2	..	89
770	Erythroblastosis	57	27	84	2	..	1	1	..	..	..	88
771	Haemorrhagic disease of newborn	10	24	34	3	1	2	..	..	..	1	41
773	Ill-defined diseases peculiar to early infancy	164	151	315	6	5	1	8	6	2	2	345
774, 776	Immaturity alone, or with mention of any other subsidiary condition	448	196	644	8	9	..	3	..	..	..	664
	Total	*1.527*	*1,044*	*2,571*	*113*	*54*	*44*	*139*	*78*	*38*	*22*	*3,059*
	Causes mainly of postnatal origin—											
571, 764	Gastro-enteritis (including diarrhoea of newborn)	..	2	2	1	2	3	21	43	35	28	135
(*b*)	Pneumonia and bronchitis	14	44	58	14	19	16	108	120	42	29	406
(*c*)	Septicaemia, skin and subcutaneous tissue infections, sepsis of newborn	2	16	18	6	1	1	5	7	4	3	45
057, 340	Meningococcal infections and non-meningococcal meningitis	..	5	5	10	3	2	7	2	9	5	43
(*d*)	Causes classified as infective or mainly infective in origin not specified above	..	2	2	6	1	..	33	37	23	12	114
E921–E925	Accidental mechanical suffocation from vomit, food, foreign body or in bed and cradle	..	4	4	2	..	3	18	37	15	10	89
E926, E980–E985	Lack of care, neglect, infanticide	2	..	2	..	..	..	..	1	..	1	4
(*e*)	Other accidents, poisonings and violence	2	1	3	2	2	2	4	9	15	12	49
	Total	*20*	*74*	*94*	*41*	*28*	*27*	*196*	*256*	*143*	*100*	*885*
140–239	Neoplasms	1	1	2	1	2	1	2	8	3	4	23
Residual	Other causes remaining	24	25	49	14	7	5	48	48	31	18	220
	All causes	1,572	1,144	2,716	169	91	77	385	390	215	144	4,187

(*a*) Age four weeks and under three months. (*b*) 490–493, 500–502, 763. (*c*) 053, 690–698, 765–768. (*d*) 001–052, 054–056, 058–138, 391–393, 470–483, 518, 519. (*e*) E800–E920, E927–E979, E990–E999.

The following table summarises the detail contained in the previous table, and, in addition, shows the proportions of deaths from the various causes in each of the periods—under one week, one week and under one month, one month and under one year, and total under one year.

DEATHS OF CHILDREN UNDER ONE YEAR OF AGE, BY CAUSE OF DEATH NUMBERS AND PROPORTIONS, AUSTRALIA, 1967

International Classification of Diseases number	Cause of death	*Age at death*							
		Under one week		*One week and under one month*		*One month and under one year*		*Total under one year*	
		Number	*Per cent*	*Number*	*Per cent*	*Number*	*Per cent*	*Number*	*Per cent*
	Causes mainly of prenatal and natal origin—								
750–759	Congenital malformations	337	12.4	134	39.8	241	21.3	712	17.0
760, 761	Birth injury	528	19.4	20	5.9	1	0.1	549	13.1
762	Postnatal asphyxia and atelectasis	549	20.2	16	4.7	6	0.5	571	13.6
769	Attributed to certain diseases of the mother	80	2.9	3	0.9	6	0.5	89	2.1
770	Erythroblastosis	84	3.1	3	0.9	1	0.1	88	2.1
771	Haemorrhagic disease of newborn	34	1.3	6	1.8	1	0.1	41	1.0
773	Ill-defined diseases peculiar to early infancy	315	11.6	12	3.6	18	1.6	345	8.2
774, 776	Immaturity alone, or with mention of any subsidiary condition	644	23.7	17	5.0	3	0.3	664	15.9
	Total	*2,571*	*94.7*	*211*	*62.6*	*277*	*24.4*	*3,059*	*73.1*
	Causes mainly of postnatal origin—								
571, 764	Gastro-enteritis (including diarrhoea of newborn)	2	0.1	6	1.8	127	11.2	135	3.2
(*a*)	Pneumonia and bronchitis	58	2.1	49	14.5	299	26.4	406	9.7
	Other	34	1.3	41	12.2	269	23.7	344	8.2
	Total	*94*	*3.5*	*96*	*28.5*	*695*	*61.3*	*885*	*21.1*
140–239, residual	Neoplasms and other causes remaining	51	1.9	30	8.9	162	14.3	243	5.8
	All causes	2,716	100.0	337	100.0	1,134	100.0	4,187	100.0

(*a*) 490–493, 500–502, 763.

Causes of death

The classification of causes of death adopted for Australia by the Commonwealth Bureau of Census and Statistics at the inception of its mortality statistics in 1907 was that introduced by the International Institute of Statistics in 1893, reviewed by that Institute in 1899, and revised by an International Commission in 1900. This classification became known as the International List of Causes of Death, and further international revisions in 1909 (Second), 1920 (Third), 1929 (Fourth), 1938 (Fifth), 1948 (Sixth), and 1955 (Seventh), were successively adopted for use in Australian statistics.

The Sixth Revision of the International Statistical Classification of Diseases, Injuries and Causes of Death was used in Australia for deaths registered in 1950 to 1957. The Seventh Revision has been used for deaths registered in the years 1958 to 1967. The Sixth Revision, for the first time in connection with the International Classification, laid down rules for a uniform method of selecting the main cause to be tabulated if more than one cause is stated on the death certificate. These rules were maintained in the Seventh Revision, which was concerned mainly with certain essential changes and amendment of errors and inconsistencies in the previous classification. Prior to 1950 the rules adopted in Australia for the selection of the cause of death to be tabulated were those laid down in the United States Manual of Joint Causes of Death, first published in 1914 and revised to conform to successive revisions of the International Classification.

The adoption of the new method introduced with the Sixth Revision and maintained in the Seventh marked a fundamental change in Australian cause of death statistics, emphasis now being placed on the underlying cause of death as indicated by the certifying practitioner. This change in principle affects the comparability of the statistics for 1950 and subsequent years with those for earlier years. A complete detailed classification of causes of death for Australia for 1950 according to both the Fifth and Sixth Revisions was shown in *Demography*, Bulletin No. 68, 1950.

In order to facilitate the concise presentation of cause of death statistics, the present International Classification provides two special lists of causes for tabulation—the Intermediate List of 150 causes and the Abbreviated List of 50 causes. The latter has been used as the base of the cause of death tabulations for 1967 which follow. Some categories have been sub-divided to show additional particulars of interest in Australian statistics. Tables A and B show deaths of males and females, respectively, in age groups, and Table C shows the total numbers of males and females who died, the death rates per million of mean population, and the percentage of total deaths.

A. DEATHS OF MALES, BY CAUSE OF DEATH AND AGE GROUP: AUSTRALIA, 1967

Abbreviated List of 50 Causes (Based on the Seventh Revision of the International list)

	Cause of death(a)	*Detailed list numbers*	*Age group (years)* 0	*1–4*	*5–14*	*15–24*	*25–34*	*35–44*	*45–54*	*55–64*	*65 and over*	*Total*
B 1	Tuberculosis of respiratory system	001–008	1	..	..	..	2	7	14	52	121	197
B 2	Tuberculosis, other forms	010–019	..	..	2	2	..	2	2	1	4	13
B 3	Syphilis and its sequelae	020–029	2	..	..	..	1	2	1	11	21	38
B 6	Dysentery, all forms	045–048	1	2	..	..	..	..	1	..	2	6
B 8	Diphtheria	055	..	1	1	..	..	..	..	..	..	2
B10	Meningococcal infections	057	3	6	2	2	..	..	1	..	..	14
B14	Measles	085	1	6	3	1	..	..	1	..	1	13
B16	Malaria	110–117	..	..	..	..	..	..	..	1	..	1
B17	All other diseases classified as infective and parasitic	(*b*)	20	7	6	7	5	13	16	18	36	128
B18	Malignant neoplasms of—											
	Digestive organs and peritoneum	150–159	1	1	1	6	28	99	324	665	1,856	2,981
	Lung	162, 163	..	..	..	2	6	69	283	758	(*d*)1,278	2,396
	Breast	170	..	..	..	..	..	..	1	2	4	7
	Genital organs	171–179	..	1	..	10	16	6	19	98	772	922
	Urinary organs	180, 181	..	1	5	..	2	8	44	114	299	473
	Leukaemia and aleukaemia	204	3	15	46	20	13	24	42	61	150	374
	Other malignant and lymphatic neoplasms	(*c*)	7	23	40	55	65	152	274	442	713	1,771
B19	Benign neoplasms and neoplasms of unspecified nature	210–239	1	2	1	7	3	5	6	14	35	74
B20	Diabetes mellitus	260	..	..	..	2	10	20	51	139	463	685
B21	Anaemias	290–293	..	1	6	1	2	4	4	15	83	116
B22	Vascular lesions affecting central nervous system	330–334	3	1	5	15	26	120	395	877	(*d*)4,378	5,820
B23	Non-meningococcal meningitis	340	18	8	1	..	2	2	4	7	4	46
B24	Rheumatic fever	400–402	..	1	1	1	..	1	2	2	..	8
B25	Chronic rheumatic heart disease	410–416	..	..	..	8	22	34	59	102	108	333
B26	Arteriosclerotic heart disease	420	..	..	1	7	45	542	2,113	4,585	(*e*)11,018	18,311
	Degenerative heart disease	421, 422	..	1	2	8	11	35	99	197	1,368	1,721
B27	Other diseases of heart	430–434	6	2	3	7	13	23	58	195	(*d*)1,203	1,510
B28	Hypertension with heart disease	440–443	..	..	..	..	1	8	45	101	402	557
B29	Hypertension without mention of heart	444–447	..	..	..	..	4	18	48	86	191	347
B30	Influenza	480–483	1	1	..	1	1	3	2	..	21	30
B31	Pneumonia	490–493	165	45	13	16	15	52	88	163	(*d*)1,248	1,805
B32	Bronchitis	500–502	18	3	2	5	4	12	86	380	1,569	2,079
B33	Ulcer of stomach and duodenum	540,541	..	..	..	1	4	20	42	92	216	375
B34	Appendicitis	550–553	..	1	2	1	..	4	4	6	23	41
B35	Intestinal obstruction and hernia	560, 561, 570	21	3	3	2	3	3	9	25	136	205
B36	Gastritis, duodenitis, enteritis, and colitis except diarrhoea of the newborn	543, 571, 572	66	43	1	5	1	5	14	20	82	237
B37	Cirrhosis of liver	581	1	2	2	2	9	55	113	117	115	416
B38	Nephritis and nephrosis	590–594	2	1	1	9	13	31	67	107	224	455
B39	Hyperplasia of prostate	610	..	..	..	..	..	..	2	19	262	283
B41	Congenital malformations	750–759	383	39	23	22	16	16	19	11	14	543
B42	Birth injuries, postnatal asphyxia and atelectasis	760–762	691	1	..	..	..	..	..	..	..	692
B43	Infections of the newborn	763–768	88	..	..	..	..	..	..	..	..	88

For footnotes *see* next page.

A. DEATHS OF MALES, BY CAUSE OF DEATH AND AGE GROUP AUSTRALIA, 1967—*continued*

ABBREVIATED LIST OF 50 CAUSES (BASED ON THE SEVENTH REVISION OF THE INTERNATIONAL LIST)—*continued*

	ause of death(a)	*Detailed list numbers*	*Age group (years)* 0	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65 and over	*Total*
44	Other diseases peculiar to early infancy, and immaturity unqualified . . .	769–776	707	1	..	..	..	..	..	..	..	708
45	Senility without mention of psychosis, ill-defined and unknown causes . .	780–795	5	5	3	7	7	16	22	18	(e)169	252
46	General arteriosclerosis .	450	..	..	..	..	..	..	11	59	939	1,009
	Other diseases of circulatory system . .	451–468	..	..	7	8	6	21	64	150	544	800
	Other diseases of respiratory system . .	470–475 510–527	56	18	4	6	9	16	33	110	362	614
	All other diseases . .	Residual	63	43	50	79	70	175	262	395	1,078	2,215
E47	Motor vehicle accidents .	E810–E835	9	65	126	806	343	293	263	244	(d)339	2,488
E48	All other accidents .	E800–E802, E840–E962	77	111	127	250	213	286	269	260	(f)478	2,071
E49	Suicide and self-inflicted injury . .	E963, E970–E979	..	..	3	108	190	248	216	185	175	1,125
E50	Homicide and operations of war	E964, E965, E980–E999	1	1	11	15	25	17	18	11	14	113
	All causes . .	..	**2,421**	**462**	**504**	**1,504**	**1,206**	**2,467**	**5,511**	**10,915**	**(g)32,518**	**57,508**

(a) No male deaths were recorded in the following categories in 1967: B4, Typhoid fever (040); B5, Cholera (043); B7, Scarlet fever nd streptococcal sore throat (050, 051); B9, Whooping cough (056); B11, Plague (058); B12, Acute poliomyelitis (080); B13, Smallpox (084); 15, Typhus and other rickettsial diseases (100–108). (b) 030–039, 041, 042, 044, 049, 052–054, 059–074, 081–083, 086–096, 120–138. c) All causes, 140–205 not shown above. (d) Includes 1, age 'not stated'. (e) Includes 2, age 'not stated'. (f) Includes 3, age ot stated'. (g) Includes 12, age 'not stated'.

B. DEATHS OF FEMALES, BY CAUSE OF DEATH AND AGE GROUP: AUSTRALIA, 1967

ABBREVIATED LIST OF 50 CAUSES (BASED ON THE SEVENTH REVISION OF THE INTERNATIONAL LIST)

	Cause of death(a)	*Detailed list numbers*	*Age group (years)* 0	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65 and over	*Total*
1	Tuberculosis of respiratory system	001–008	..	..	..	..	..	3	10	11	28	52
2	Tuberculosis, other forms .	010–019	..	2	..	1	..	..	..	3	7	13
3	Syphilis and its sequelae .	020–029	..	..	..	..	..	1	2	2	17	22
6	Dysentery, all forms . .	045–048	..	2	..	..	..	1	..	1	2	6
7	Scarlet fever and streptococcal sore throat . .	050, 051	..	..	..	..	..	..	..	..	1	1
9	Whooping cough . .	056	..	1	..	..	..	..	..	..	..	1
10	Meningococcal infections .	057	1	4	..	2	..	1	..	1	2	11
14	Measles	085	4	5	1	..	..	..	..	..	1	11
17	All other diseases classified as infective and parasitic	(b)	23	10	5	2	6	9	12	14	41	122
18	Malignant neoplasms of— Digestive organs and peritoneum . .	150–159	..	1	..	4	18	81	253	481	1,840	2,678
	Lung	162, 163	..	1	..	..	2	17	69	92	191	372
	Breast	170	..	..	..	2	16	118	291	321	662	1,410
	Genital organs . .	171–179	..	..	2	4	11	84	217	266	501	1,085
	Urinary organs . .	180, 181	..	4	1	1	..	5	21	55	161	248
	Leukaemia and aleukaemia . . .	204	3	19	32	21	13	27	20	45	115	295
	Other malignant and lymphatic neoplasms .	(c)	3	9	24	33	34	78	166	233	578	1,158
19	Benign neoplasms and neoplasms of unspecified nature	210–239	5	2	5	3	3	13	19	16	39	105
20	Diabetes mellitus . .	260	..	..	2	7	2	13	31	135	769	959
21	Anaemias . . .	290–293	2	2	2	3	1	4	6	14	120	154

For footnotes *see* next page.

B. DEATHS OF FEMALES, BY CAUSE OF DEATH AND AGE GROUP AUSTRALIA, 1967—*continued*

ABBREVIATED LIST OF 50 CAUSES (BASED ON THE SEVENTH REVISION OF THE INTERNATIONAL LIST)—*continued*

Cause of death(a)	*Detailed list numbers*	*Age group (years)* 0	*1–4*	*5–14*	*15–24*	*25–34*	*35–44*	*45–54*	*55–64*	*65 and over*	*Total*
B22 Vascular lesions affecting central nervous system .	330–334	3	1	5	8	27	130	387	712	6,430	7,703
B23 Non-meningococcal meningitis	340	21	6	4	1	..	1	3	1	7	44
B24 Rheumatic fever . .	400–402	..	..	2	..	..	..	..	1	3	6
B25 Chronic rheumatic heart disease	410–416	..	..	..	2	15	24	81	100	181	403
B26 { Arteriosclerotic heart disease	420	..	..	..	1	18	104	501	1,462	(d)8,956	11,042
B26 { Degenerative heart disease	421, 422	1	2	..	4	10	16	48	88	(e)1,958	2,127
B27 Other diseases of heart .	430–434	5	1	3	7	9	20	40	92	1,400	1,577
B28 Hypertension with heart disease	440–443	..	..	..	..	1	6	38	86	615	746
B29 Hypertension without mention of heart . . .	444–447	..	..	..	..	4	12	31	40	251	338
B30 Influenza	480–483	2	1	..	..	1	1	3	2	15	25
B31 Pneumonia	490–493	108	33	13	13	10	28	51	78	(f)1,193	1,527
B32 Bronchitis . . .	500–502	10	5	5	2	2	6	26	55	308	419
B33 Ulcer of stomach and duodenum	540, 541	..	..	..	..	2	11	17	17	133	180
B34 Appendicitis . . .	550–553	..	2	1	1	1	1	1	2	16	25
B35 Intestinal obstruction and hernia	560,561,570	17	1	..	..	3	3	12	26	169	231
B36 Gastritis, duodenitis, enteritis and colitis, except diarrhoea of the newborn	543,571,572	63	38	2	5	1	6	8	17	147	287
B37 Cirrhosis of liver . .	581	1	..	..	4	10	18	49	43	63	188
B38 Nephritis and nephrosis .	590–594	1	2	8	7	15	34	63	64	214	408
B40 Complications of pregnancy, childbirth and the puerperium . . .	640–652, 670–689	..	..	..	12	23	17	1	..	..	53
B41 Congenital malformations .	750–759	329	44	35	6	10	9	19	25	13	490
B42 Birth injuries, postnatal asphyxia and atelectasis .	760–762	429	..	..	..	..	..	..	..	..	429
B43 Infections of the newborn	763–768	52	..	..	..	..	..	..	..	..	52
B44 Other diseases peculiar to early infancy, and immaturity unqualified . .	769–776	531	1	..	..	..	..	..	..	..	532
B45 Senility without mention of psychosis, ill-defined and unknown causes . .	780–795	10	6	4	9	6	13	16	15	288	367
B46 { General arteriosclerosis .	450	..	..	..	..	..	3	3	25	(e)1,243	1,274
B46 { Other diseases of circulatory system. . .	451–468	..	1	1	8	18	28	48	91	394	589
B46 { Other diseases of respiratory system. . .	470–475 510–527	41	9	4	2	5	16	22	31	174	304
B46 { All other diseases . .	Residual	46	46	40	58	70	137	280	326	1,360	2,363
BE47 Motor vehicle accidents .	E810–E835	9	51	82	199	69	70	106	89	172	847
BE48 All other accidents .	E800–E802 E840–E962	45	65	30	41	32	77	78	106	724	1,198
BE49 Suicide and self-inflicted injury . . .	E963, E970–E979	..	..	1	48	92	128	159	122	103	653
BE50 Homicide and operations of war .	E964, E965, E980–E999	1	6	3	18	8	13	8	4	4	65
All causes . .	..	1,766	383	317	539	568	1,387	3,216	5,410	(g)31,609	45,195

(*a*) No female deaths were recorded in the following categories in 1967: B4, Typhoid fever (040); B5, Cholera (043); B8, Diphtheria (055); B11, Plague (058); B12, Acute poliomyelitis (080); B13, Smallpox (084); B15, Typhus and other rickettsial diseases (100–108); B16, Malaria (110–117). (*b*) 030–039, 041, 042, 044, 049, 052–054, 059–074, 081–083, 086–096, 120–138. (*c*) All causes, 140–205 not shown above. (*d*) Includes 3, age 'not stated'. (*e*) Includes 1, age 'not stated'. (*f*) Includes 2, age 'not stated'. (*g*) Includes 7, age 'not stated'.

C. DEATHS, BY CAUSE OF DEATH AND SEX: NUMBERS AND RATES AUSTRALIA, 1967

ABBREVIATED LIST OF 50 CAUSES (BASED ON THE SEVENTH REVISION OF THE INTERNATIONAL LIST)

Cause of death		*Detailed list numbers*	*Number of deaths*			*Rate per 1,000,000 of mean population*	*Percentage of total deaths*
			Males	*Females*	*Persons*		
B 1	Tuberculosis of respiratory system	001–008	197	52	249	21	0.24
B 2	Tuberculosis, other forms	010–019	13	13	26	2	0.03
B 3	Syphilis and its sequelae	020–029	38	22	60	5	0.06
B 4	Typhoid fever	040	..	..	..	..	..
B 5	Cholera	043	..	..	..	..	..
B 6	Dysentery, all forms	045–048	6	6	12	1	0.01
B 7	Scarlet fever and streptococcal sore throat	050, 051	..	1	1	(*a*)	0.00
B 8	Diphtheria	055	2	..	2	(*a*)	0.00
B 9	Whooping cough	056	..	1	1	(*a*)	0.00
B10	Meningococcal infections	057	14	11	25	2	0.02
B11	Plague	058	..	..	..	..	..
B12	Acute poliomyelitis	080	..	..	..	..	..
B13	Smallpox	084	..	..	..	..	..
B14	Measles	085	13	11	24	2	0.02
B15	Typhus and other rickettsial diseases	100–108	..	..	..	..	..
B16	Malaria	110–117	1	..	1	(*a*)	0.00
B17	All other diseases classified as infective and parasitic	(*b*)	128	122	250	21	0.24
B18	Malignant neoplasms of—						
	Digestive organs and peritoneum	150–159	2,981	2,678	5,659	483	5.51
	Lung	162, 163	2,396	372	2,768	236	2.70
	Breast	170	7	1,410	1,417	121	1.38
	Genital organs	171–179	922	1,085	2,007	171	1.95
	Urinary organs	180, 181	473	248	721	62	0.70
	Leukaemia and aleukaemia	204	374	295	669	57	0.65
	Other malignant and lymphatic neoplasms	(*c*)	1,771	1,158	2,929	250	2.85
B19	Benign and unspecified neoplasms	210–239	74	105	179	15	0 17
B20	Diabetes mellitus	260	685	959	1,644	140	1.60
B21	Anaemias	290–293	116	154	270	23	0.26
B22	Vascular lesions affecting central nervous system	330–334	5,820	7,703	13,523	1,155	13.17
B23	Non-meningococcal meningitis	340	46	44	90	8	0.09
B24	Rheumatic fever	400–402	8	6	14	1	0.01
B25	Chronic rheumatic heart disease	410–416	333	403	736	63	0.72
B26	Arteriosclerotic heart disease	420	18,311	11,042	29,353	2,507	28.58
	Degenerative heart disease	421, 422	1,721	2,127	3,848	329	3.75
B27	Other diseases of heart	430–434	1,510	1,577	3,087	264	3.01
B28	Hypertension with heart disease	440–443	557	746	1,303	111	1.27
B29	Hypertension without mention of heart	444–447	347	338	685	59	0.67
B30	Influenza	480–483	30	25	55	5	0.05
B31	Pneumonia	490–493	1,805	1,527	3,332	285	3.24
B32	Bronchitis	500–502	2,079	419	2,498	213	2.43
B33	Ulcer of stomach and duodenum	540, 541	375	180	555	47	0.54
B34	Appendicitis	550–553	41	25	66	6	0.06
B35	Intestinal obstruction and hernia	560, 561–570	205	231	436	37	0.42
B36	Gastritis, duodenitis, enteritis and colitis, except diarrhoea of the newborn	543, 571, 572	237	287	524	45	0.51
B37	Cirrhosis of liver	581	416	188	604	52	0.59
B38	Nephritis and nephrosis	590–594	455	408	863	74	0.84
B39	Hyperplasia of prostate	610	283	..	283	24	0.28
B40	Complications of pregnancy, childbirth and the puerperium	640–652 670–689	..	53	53	5	0.05
B41	Congenital malformations	750–759	543	490	1,033	88	1.01
B42	Birth injuries, postnatal asphyxia and atelectasis	760–762	692	429	1,121	96	1.09
B43	Infections of the newborn	763–768	88	52	140	12	0.14
B44	Other diseases peculiar to early infancy, and immaturity unqualified	769–776	708	532	1,240	106	1.21
B45	Senility without mention of psychosis, ill-defined and unknown causes	780–795	252	367	619	53	0.60
B46	General arteriosclerosis	450	1,009	1,274	2,283	195	2.22
	Other diseases of circulatory system	451–468	800	589	1,389	119	1.35
	Other diseases of respiratory system	470–475 510–527	614	304	918	78	0.89
	All other diseases	Residual	2,215	2,363	4,578	391	4.46
BE47	Motor vehicle accidents	E810–E835	2,488	847	3,335	285	3.25
BE48	All other accidents	E800–E802 E840–E962	2,071	1,198	3,269	279	3.18
BE49	Suicide and self-inflicted injury	E963, E970–E979	1,125	653	1,778	152	1.73
BE50	Homicide and operations of war	E964, E965 E980–E999	113	65	178	15	0.17
	All causes	..	57,508	45,195	102,703	8,772	100.00

(*a*) Less than 0.5. (*b*) 030–039, 041, 042, 044, 049, 052–054, 059–074, 081–083, 086–096, 120–138. (*c*) 140–148, 160, 161, 164, 165, 190–203, 205.

Deaths from certain important causes

In the preceding tables, particulars have been given for each of the causes of death comprising the Abbreviated Classification according to the Seventh Revision of the International List. Certain important causes are treated in detail hereunder. The Abbreviated Classification numbers used in tables A to C (pages 196–9) are indicated in parentheses for each cause or group of causes.

All forms of tuberculosis (*B1*, *B2*). In comparing any of the figures for 1950 and subsequent years with those for 1949 and earlier years, consideration should be given to the effect of the change in basis from the Fifth to the Sixth Revision of the International List. This was discussed in Year Book No. 39, page 626. The following table shows the age groups of males and females who were classified as dying from tuberculosis in 1967, together with figures for 1931, 1941, 1951 and 1961.

DEATHS FROM TUBERCULOSIS (ALL FORMS), BY AGE GROUP AND SEX AUSTRALIA, 1931 TO 1967(*a*)

	Males					*Females*				
Age group (years)	*1931*	*1941*	*1951*	*1961*	*1967*	*1931*	*1941*	*1951*	*1961*	*1967*
0–14	90	63	23	5	3	81	54	35	1	2
15–29	294	162	46	2	2	487	275	68	..	1
30–44	585	428	135	25	11	422	319	142	20	3
45–64	674	793	570	128	69	252	251	126	41	24
65 and over	193	279	306	175	125	89	110	86	50	35
Not stated	..	..	..	..	..	..	..	1	..	..
Total	**1,836**	**1,725**	**1,080**	**335**	**210**	**1,331**	**1,009**	**458**	**112**	**65**

(*a*) Excludes particulars of full-blood Aborigines before 1967.

The reduction in mortality from tuberculosis is shown by the decline in the crude death rate from tubercular diseases, which fell from 49 per 100,000 of mean population in 1931 to 18 in 1951, and to 2 in 1967. The reductions in the younger age groups are much greater, as can be seen from the table above. In making these comparisons, consideration of the effect of the change in basis from the Fifth to the Sixth Revision of the International List (*see* above) is particularly important.

Of the more developed countries, those with the lowest death rates from tuberculosis per 100,000 of population are: Netherlands, 1.5; Denmark, 2.0; Australia, 2.3; Israel, 3.1; Canada, 3.3; United States of America, 3.9; and New Zealand, 4.1. Rates for selected countries in each continent are:

Africa—South Africa (white population), 6.0; United Arab Republic, 14.7.

North America—Dominican Republic, 7.7; Mexico, 22.2; Guatemala, 27.3.

South America—Argentina, 19.9; Peru, 54.1; Brazil, 82.3.

Asia—Japan, 22.8; Philippines, 81.8; India, 82.7.

Europe—Norway, 3.9; England and Wales, 4.8; Scotland, 5.6; Italy, 12.9; France, 14.6; Poland, 37.4.

Malignant neoplasms, including neoplasms of lymphatic and haematopoietic tissues (*B18*). Deaths classified under this heading according to the Sixth and Seventh Revisions of the International List (used in Australia for deaths registered since 1950) are not directly comparable in total with those on the Fifth Revision basis (*see* Year Book No. 39, p. 628).

A summary regarding seat of disease for 1967 is given on the next page.

DEATHS FROM MALIGNANT NEOPLASMS AND NEOPLASMS OF LYMPHATIC AND HAEMATOPOIETIC TISSUES, BY SEAT OF DISEASE AND SEX: AUSTRALIA, 1967

Seat of disease	*Males*	*Females*	*Persons*
Malignant neoplasms—			
Buccal cavity and pharynx	227	91	318
Digestive organs and peritoneum—			
Oesophagus	210	119	329
Stomach	955	614	1,569
Small intestine	22	21	43
Large intestine	742	1,031	1,773
Other	1,052	893	1,945
Respiratory system	2,558	415	2,973
Breast	7	1,410	1,417
Uterus	..	608	608
Other female genital organs	..	477	477
Male genital organs	922	..	922
Urinary organs	473	248	721
Skin	256	182	438
Other and unspecified organs	671	526	1,197
Total, malignant neoplasms	*8,095*	*6,635*	*14,730*
Neoplasms of lymphatic and haematopoietic tissues—			
Lymphosarcoma and reticulosarcoma	214	140	354
Hodgkin's disease	103	67	170
Other forms of lymphoma (reticulosis)	42	24	66
Multiple myeloma (plasmocytoma)	94	84	178
Leukaemia and aleukaemia	374	295	669
Mycosis fungoides	2	1	3
Total, neoplasms of lymphatic and haematopoietic tissues	*829*	*611*	*1,440*
Grand total	**8,924**	**7,246**	**16,170**

The ages of males and females who died from malignant neoplasms in 1967 are given below, together with figures for 1931, 1941, 1951, and 1961. The increase in the number of deaths from malignant neoplasms in the years since 1931 is due principally to the increase in the number of people in the higher age groups, at which ages the risks of cancer are much greater. While the total population increased by about 81 per cent between 1931 and 1967, the number of people aged 55 years and over increased by about 129 per cent. The increase in the number of deaths in the lower age groups from 1951 is due partly to the inclusion of neoplasms of lymphatic and haematopoietic tissues, and it is probable also that part of the increased number of deaths from cancer recorded in recent years has been due to improved diagnosis and certification on the part of the medical profession.

DEATHS FROM MALIGNANT NEOPLASMS(*a*), BY AGE GROUP AND SEX AUSTRALIA, 1931 TO 1967(*b*)

	Males					*Females*				
Age group (years)	*1931*	*1941*	*1951(a)*	*1961(a)*	*1967(a)*	*1931*	*1941*	*1951(a)*	*1961(a)*	*1967(a)*
Under 15	25	21	91	130	144	23	25	71	114	99
15–29	43	49	103	109	140	38	45	76	84	102
30–44	196	176	275	380	441	326	344	387	481	467
45–54	410	465	584	823	987	548	685	692	847	1,037
55–64	868	983	1,334	1,699	2,140	744	926	1,180	1,207	1,493
65 and over	1,942	2,561	3,128	4,239	5,071	1,426	2,198	2,698	3,575	4,048
Not stated	..	..	..	..	1	..	..	..	1	..
Total	**3,484**	**4,255**	**5,515**	**7,380**	**8,924**	**3,105**	**4,223**	**5,104**	**6,309**	**7,246**

(*a*) Includes neoplasms of lymphatic and haematopoietic tissues. (*b*) Excludes particulars of full-blood Aborigines before 1967.

The death rates from malignant neoplasms have continued to rise over recent years. The rates are crude death rates representing the number of deaths from malignant neoplasms per 100,000 of mean population and do not take account of changes in the age constitution of the population, and to a substantial extent they reflect the increasing age of the population rather than the true change in mortality from malignant neoplasms (*see* previous paragraph). In 1931 the rate for Australia was 101 (males, 105; females, 97); in 1941 it was 119 (males, 119; females, 120); and in 1951 it had risen to 126 (males, 130; females, 122). Figures for 1961 gave a rate of 130 (males, 139; females, 121), and for 1967 a rate of 138 (males, 151; females, 125).

Death rates from malignant neoplasms per 100,000 of mean population for Australia and for various other countries are as follows: Brazil, 94; Israel, 106; Japan, 108: Poland, 128; Canada, 134; South Africa (white population), 135; Australia, 138; United States of America, 155; Italy, 162; Netherlands, 187; France, 204; England and Wales, 225; Scotland, 231. The rates are for the latest available year in each case.

Diseases of the heart (*B25 to B28*). The number of deaths classified to diseases of the heart in 1967 was 38,327 (22,432 males and 15,895 females). This class is the largest among causes of death, the rate having increased from 112 per 100,000 of mean population in 1911–15 to 327 in 1967. The increase in the number of deaths recorded from heart diseases has been particularly pronounced during the past twenty years. The rapid increase in mortality is partly a reflection of the ageing of the population, but the figures have been influenced mainly by improved diagnosis and certification by medical practitioners.

The death rates from heart diseases per 100,000 of mean population for various years from 1931 were as follows: 1931, 159 (males, 178; females, 142); 1941, 269 (males, 306; females, 231); 1951, 314 (males, 367; females, 259); 1961, 304 (males, 356; females, 250); and 1967, 327 (males, 380; females, 273). Deaths from heart diseases in 1967 represented 37 per cent of the total deaths.

Puerperal causes (*B40*). It was shown in Year Book No. 39, page 634, that the changes introduced with the Sixth Revision of the International List did not significantly affect the comparability of the total number of deaths from puerperal causes. The Seventh Revision, introduced in 1958, did not affect comparability. The death rate from these causes has fallen rapidly during recent years and in 1967 the rate was 0.2 per 1,000 live births, compared with a rate of 6 per 1,000 in 1936. The 53 deaths in 1967 are equivalent to a death rate of 0.91 per 100,000 females. The death rate may be expressed in other terms by stating that for every 4,326 babies born alive in 1967 one woman died from puerperal causes. The death rate per 1,000 live births from puerperal causes in various countries for the latest available year is as follows: Denmark and Sweden, 0.1; Australia, Norway and Netherlands, 0.2; Canada, France, Finland, United Kingdom and United States, 0.3; New Zealand and Switzerland, 0.4; Italy, 0.8; Japan, 0.9.

Causes of infant mortality. See paragraphs devoted to causes of infant deaths on pages 194–5.

Accidents, poisonings and violence (*BE47 to BE50*). Deaths in this class are classified according to external cause and not according to nature of injury. The classification provides sub-groups for accidents, including adverse reactions to prophylactic inoculations, therapeutic misadventures and late effects of accidental injury; suicide; homicide and injuries purposely inflicted by other persons; and injury resulting from operations of war, including delayed effects.

The following table, showing the death rates in the main sub-groups per 100,000 of mean population, indicates that the death rate from violence is between two and three times as great for males as for females. The low level of the rates and proportions for the years 1941–45 is due largely to the exclusion of deaths of defence personnel from accidents, suicide and homicide, though the rates have been based on total mean population (including defence personnel). A further contributing factor is the decrease during this period in the number of automobile accidents. From July 1947 deaths of defence personnel from accidents, etc. have again been included.

ACCIDENTS, POISONINGS, AND VIOLENCE: DEATH RATES(*a*), BY SEX AUSTRALIA, 1936 TO 1967(*b*)

	Death rate from—												*All violence, proportion per 10,000 deaths*		
	Accidents(c)			*Suicide*			*Homicide(d)*			*Total violence*					
Period	*M.*	*F.*	*P.*	*M.*	*F.*	*P.*	*M.*	*F.*	*P.*	*M.*	*F.*	*P.*	*M.*	*F.*	*P*
1936–40 . .	86	28	58	17	5	11	2	1	1	105	34	70	979	399	724
1941–45 . .	67	26	46	11	4	8	1	1	1	79	31	55	730	348	558
1946–50 . .	76	27	51	14	5	10	1	1	1	91	33	62	844	383	640
1951–55 . .	82	31	57	15	5	10	2	1	1	99	37	68	964	453	740
1956–60 . .	75	32	53	16	6	11	2	1	2	93	39	66	957	495	754
1961–65 . .	72	32	52	19	9	14	2	1	1	93	43	68	954	550	777
1962 . . .	71	33	52	19	9	14	2	1	2	92	43	68	952	559	780
1963 . . .	69	29	49	21	11	16	2	1	1	92	41	66	944	529	762
1964 . . .	73	34	53	19	10	15	2	1	2	94	45	70	939	561	772
1965 . . .	74	33	54	19	11	15	1	1	1	95	46	70	970	584	800
1966 . . .	73	34	54	17	11	14	2	1	1	93	46	69	933	572	773
1967 . . .	77	35	56	19	11	15	2	1	1	98	48	73	1,008	611	833

(*a*) Number of deaths per 100,000 of mean population. (*b*) Excludes particulars of full-blood Aborigines before 1967. (*c*) Includes 'open verdict'. (*d*) Includes the late effects of injuries due to operations of war.

In 1967 the total number of deaths from *accidental causes* (*BE47*, *BE48*) was 6,604 (4,559 males and 2,045 females). Over half of the accidental deaths were the result of transport accidents. Of these, the numbers attributable to the major causes, and the percentages of the total accidental deaths in each case, were as follows: Motor vehicle traffic accidents, 3,272 (49.55 per cent); motor vehicle non-traffic accidents, 63 (0.95 per cent); other road vehicle accidents, 48 (0.73 per cent); railway accidents, 93 (1.41 per cent); water transport accidents, 122 (1.85 per cent); aircraft accidents, 54 (0.82 per cent); a total of 3,652 (55.30 per cent). Other important causes were accidental falls, 1151 (17.43 per cent); accidental drowning, 399 (6.04 per cent); accidental poisonings, 351 (5.31 per cent); and accidents caused by fire and explosion of combustible material, 292 (4.42 per cent).

Deaths from *suicide* (*BE49*) in 1967 numbered 1,778 (males 1,125; females, 653). Poisoning, other than by gases, was used in 795 cases (44.71 per cent of total deaths by suicide). Other important modes adopted, together with the numbers and relevant percentages, were as follows: firearms and explosives, 357 (20.08 per cent); poisoning by gases, 264 (14.85 per cent); hanging or strangulation, 158 (8.89 per cent); submersion (drowning), 91 (5.12 per cent); other and unspecified modes, 113 (6.36 per cent). Of the 1,125 males who committed suicide, 329 (29.24 per cent) used firearms or explosives. For females the most common mode was poisoning (other than by gases). This was used in 425 cases (65.01 per cent). The following table table shows the age of persons who committed suicide in 1967.

PERSONS WHO COMMITTED SUICIDE, BY AGE GROUP AND SEX AUSTRALIA, 1967

Age group (years)	*Males*	*Females*	*Persons*	*Age group (years)*	*Males*	*Females*	*Persons*
10–14 . . .	3	1	4	55–59 . . .	99	64	163
15–19 . . .	32	14	46	60–64 . . .	86	58	144
20–24 . . .	76	34	110	65–69 . . .	75	53	128
25–29 . . .	95	46	141	70–74 . . .	42	25	67
30–34 . . .	95	46	141	75–79 . . .	37	18	55
35–39 . . .	111	53	164	80–84 . . .	13	4	17
40–44 . . .	137	75	212	85 and over . .	8	3	11
45–49 . . .	108	88	196				
50–54 . . .	108	71	179	**Total deaths** .	**1,125**	**653**	**1,778**

Of the 178 deaths recorded in 1967 from *homicide and operations of war* (*BE50*) there were 163 deaths from homicide and injury purposely inflicted by other persons (not in war), of which assault by firearms and explosives caused 66, assault by cutting and piercing instruments 25, and assault by other means 72. Deaths from injury resulting from the operations of war numbered 15, 14 of which were deaths from late effects of such injuries.

Age at death and average issue of deceased married males and females

Demography, Bulletin No. 85, contains a number of tables showing, in combination with the issue, the age at marriage, age at death and occupation of married (including widowed or divorced) persons who died in Australia in 1967. Deaths of married males in 1967 numbered 45,231, and those of married females, 37,060. The tables which follow deal, however, with only 44,653 males and 36,812 females, the information regarding issue in the remaining 826 cases being incomplete. The total number of children in the families of the 44,653 males was 125,607 and of the 36,812 females, 110,143. The average number of children is shown for various age groups in the following table.

AVERAGE ISSUE: DECEASED MARRIED(*a*) MALES AND FEMALES, BY AGE AT DEATH, AUSTRALIA, 1931 TO 1967(*b*)

Age at death (years)	*Average issue*									
	Males					*Females*				
	1931	*1941*	*1951*	*1961*	*1967*	*1931*	*1941*	*1951*	*1961*	*1967*
Under 20	0.75	..	0.43	0.33	0.56	0.66	0.79	0.83	0.75	0.52
20–24	0.81	0.73	0.96	0.93	1.04	1.13	0.95	0.86	1.12	1.02
25–29	1.33	1.12	1.29	1.56	1.55	1.81	1.45	1.61	2.00	1.80
30–34	1.79	1.76	1.79	2.23	2.05	2.34	1.91	1.98	2.37	2.47
35–39	2.13	2.11	2.12	2.37	2.60	2.89	2.30	2.49	2.47	2.80
40–44	2.77	2.49	2.30	2.44	2.69	3.29	2.77	2.39	2.44	2.78
45–49	3.10	2.68	2.51	2.49	2.79	3.55	2.93	2.59	2.38	2.54
50–54	3.46	2.96	2.56	2.46	2.60	3.60	3.29	2.76	2.43	2.47
55–59	3.69	3.28	2.71	2.45	2.58	4.01	3.55	3.03	2.50	2.52
60–64	4.02	3.55	3.07	2.58	2.54	4.21	3.79	3.29	2.69	2.53
65–69	4.41	3.73	3.25	2.77	2.56	4.82	4.01	3.63	3.04	2.75
70–74	5.06	4.17	3.58	3.00	2.77	5.41	4.29	3.64	3.30	2.82
75–79	5.65	4.56	3.83	3.31	2.97	6.02	4.85	3.96	3.44	3.16
80–84	6.17	4.93	4.30	3.62	3.21	6.26	5.39	4.19	3.58	3.28
85–89	6.59	5.70	4.63	3.94	3.52	6.57	5.85	4.68	3.78	3.51
90–94	6.94	6.57	5.06	4.39	3.77	6.73	6.11	5.08	3.99	3.56
95–99	6.69	7.04	5.78	4.76	4.02	7.10	6.34	5.76	4.51	4.03
100 and over	7.00	8.69	5.71	5.38	3.21	8.20	6.73	7.72	4.63	4.04
Age not stated	5.00	..	8.00	..	0.50	5.00	..	5.50	5.00	0.00
All ages	**4.44**	**3.91**	**3.39**	**2.98**	**2.81**	**4.72**	**4.22**	**3.68**	**3.22**	**2.99**

(*a*) Includes widowed or divorced. (*b*) Excludes particulars of full-blood Aborigines before 1967.

Age at marriage of deceased males and females, and issue

The following table shows the average issue of males and females according to the age at marriage of the deceased.

AVERAGE ISSUE: DECEASED MALES AND FEMALES, BY AGE AT MARRIAGE AUSTRALIA, 1931 TO 1967(*a*)

Age at marriage (years)(*b*)	*Average issue*									
	Males					*Females*				
	1931	*1941*	*1951*	*1961*	*1967*	*1931*	*1941*	*1951*	*1961*	*1967*
Under 15	..	..	..	..	..	6.36	7.80	4.88	4.45	5.77
15–19	6.15	5.40	4.63	4.11	3.99	6.79	6.10	5.41	4.74	4.45
20–24	5.56	4.89	4.23	3.65	3.46	5.23	4.80	4.28	3.77	3.41
25–29	4.70	4.21	3.65	3.16	2.95	3.79	3.51	3.14	2.85	2.66
30–34	3.96	3.41	3.00	2.64	2.44	2.42	2.35	2.23	1.98	1.85
35–39	3.14	2.80	2.45	2.11	1.95	1.40	1.26	1.16	1.14	1.02
40–44	2.36	2.01	1.69	1.49	1.37	0.39	0.35	0.36	0.31	0.31
45–49	1.96	1.52	1.33	1.11	0.94	0.12	0.01	0.07	0.06	0.11
50–54	1.60	1.05	0.80	0.71	0.42	..	..	..	..	0.01
55–59	0.95	0.79	0.49	0.25	0.24	..	..	..	..	..
60–64	0.63	0.29	0.24	0.25	0.26	..	..	..	..	..
65 and over	0.18	0.01	0.29	0.24	0.17	..	..	..	..	..
Age not stated	3.64	2.95	2.81	2.40	2.26	3.96	2.45	3.17	2.44	2.19
All ages	**4.44**	3.91	3.39	2.98	**2.81**	**4.72**	4.22	**3.68**	3.22	2.99

(*a*) Excludes particulars of full-blood Aborigines before 1967. (*b*) In cases where the deceased was married more than once this represents age at first marriage.

Vital statistics of External Territories

The following table shows, for the year 1967, the number of marriages, births and deaths registered in the External Territories under the control of Australia. More detailed information will be found in a series of tables in *Demography*, Bulletin No. 85.

EXTERNAL TERRITORIES: VITAL STATISTICS, 1967

Territory	*Marriages*	*Births*	*Deaths*
Christmas Island(*a*)	6	47	9
Cocos (Keeling) Islands(*a*)	n.a.	n.a.	n.a.
Norfolk Island(*a*)	7	10	10
Territory of Papua and New Guinea(*b*) . .	320	1,088	102

(*a*) Total population. (*b*) Non-indigenous population only.

International vital statistics

In the following table vital statistics rates for selected countries are shown. Crude marriage, birth, and death rates represent the number of 'events' reported for the year stated per 1,000 of the population. Infant mortality rates are the number of deaths which occurred under one year of age per 1,000 live births. The true death rates (reciprocals of the expectation of life at birth) have been computed from the life tables for the respective countries as published in the United Nations *Demographic Yearbook*, 1967 (*see* explanation of true death rates, pages 184–5).

In many instances the rates shown in the following table are estimates and the results of sample surveys only. Reference should be made to the detailed comments contained in the United Nations *Demographic Yearbook*, 1967 (*see* particularly Technical Notes on Statistical Tables and footnotes to the tables). The countries are arranged in the same order as in the table on pages 160–1 of the Population chapter.

VITAL STATISTICS RATES: SELECTED COUNTRIES—LATEST AVAILABLE YEAR

(*Source:* United Nations *Demographic Yearbook, 1967*)

		Rates(a)					*True death rates(b)*	
Country	*Year*	*Marriage*	*Birth*	*Death*	*Infant mortality*	*Year*	*Male*	*Female*
Africa—								
United Arab Republic .	1967	7.3	39.3	14.3	83.2	1960	19.4	18.6
South Africa—								
Asian population . .	1966	(*c*)7.5	33.9	7.3	42.6	1950–52	17.9	18.3
Coloured population .	1966	(*c*)6.1	45.6	14.9	127.6	1950–52	22.3	20.9
White population . .	1966	(*c*)9.7	22.8	8.6	(*c*)25.9	1950–52	15.5	14.3
Morocco(*d*) . . .	1962	n.a.	46.1	18.7	149	1962	21.3	
Upper Volta(*d*) . .	1960–61	n.a.	53	35	182	1960–61	31.2	32.2
Southern Rhodesia(*d*)(*e*) .	1962	n.a.	48.1	14.0	(*f*)122	1962	20.0	
Ivory Coast(*d*)(*e*) . .	1961	n.a.	56.1	33.3	n.a.	1957–58	28.6	
Zambia(*d*)(*e*) . . .	1963	n.a.	51.4	19.6	(*g*)259	1963	25.0	
Senegal(*d*) . . .	1960–61	n.a.	43.3	16.7	92.9	1957	27.0	
Dahomey(*d*)(*e*) . . .	1961	n.a.	54.0	26.0	109.6	1961	26.8	
Central African Republic(*d*)(*e*) . .	1959–60	n.a.	48	30	190	1959–60	30.3	27.8
North America—								
United States of America .	1967	9.7	17.9	9.4	22.1	1966	15.0	13.6
Mexico	1960–65	(*h*)6.8	(*d*)44–45	(*d*)10–11	(*i*)62.9	1956	18.1	17.3
Canada	1967	8.0	18.0	7.3	(*i*)23.1	1960–62	14.6	13.5
Guatemala	1960–65	(*i*)3.5	(*d*)46–48	(*d*)18–20	(*i*)91.5	1964	20.7	20.1
Haiti(*d*)	1960–65	n.a.	45–50	20–24	n.a.	1950	30.7	
El Salvador	1960–65	(*h*)3.3	(*d*)47–49	(*d*)14–16	(*i*)62.0	1960–61	17.7	16.6
Puerto Rico	1967	9.7	26.2	5.5	(*i*)36.7	1959–61	14.9	13.9
Jamaica	1960–65	(*i*)4.1	(*d*)39–40	(*d*)8–9	(*i*)35.4	1959–61	16.0	15.0
Costa Rica	1960–65	(*i*)5.8	(*d*)44.46	(*d*)8–9	(*i*)69.9	1962–64	16.2	15.4

For footnotes *see* next page.

VITAL STATISTICS RATES: SELECTED COUNTRIES—LATEST AVAILABLE YEAR—*continued*

		Rates(a)					*True death rates(b)*	
Country	*Year*	*Marriage*	*Birth*	*Death*	*Infant mortality*	*Year*	*Male*	*Female*
South America—								
Brazil(*d*)	1960–65	n.a.	41–43	10–12	n.a.	1940–50	25.4	22.0
Argentina	1960–65	6.9	22.5	8.8	58.3	1960–65	15.7	14.4
Colombia(*d*)	1960–65	(*i*)4.6	41–44	12–14	(*i*)80.0	1950–52	22.6	21.8
Peru(*d*)(*j*)	1960–65	(*i*)4.3	44–45	12–14	(*i*)63.0	1961	19.3	18.6
Venezuela(*d*)(*j*)	1960–65	(*h*)5.6	46–48	9–10	(*h*)45.5	n.a.	n.a.	n.a.
Chile	1966	7.5	30.6	10.4	127.5	1952	20.1	18.6
Bolivia(*d*)	1960–65	(*h*)5.5	43–45	20–22	(*k*)86.0	1949–51	20.1	20.1
Asia—								
China (mainland)(*d*)	1957	n.a.	34	11	n.a.	n.a.	n.a.	n.a.
India(*d*)	1951–61	n.a.	41.7	22.8	139	1951–60	23.9	24.7
Indonesia	1962	10.6	(*d*)43.0	(*d*)21.4	(*d*)125	1960	21.1	21.1
Pakistan(*d*)	1965	n.a.	49	18	(*b*)142	1962	18.6	20.5
Japan	1967	9.5	19.3	6.7	(*i*)19.3	1965	14.8	13.7
Thailand	1965	3.6	(*d*)(*m*)46.0	(*d*)(*m*)12.9	31.2	1959–61	18.6	17.0
Korea, Republic of(*d*)	1955–60	n.a.	44.7	16.0	n.a.	1955–60	19.6	18.6
China, Republic of (Taiwan)	1967	7.4	28.5	5.5	(*i*)(*n*)20.2	1963	15.3	14.8
Ceylon	1967	(*i*)5.9	31.5	8.2	(*o*)55.8	1962	16.2	16.3
West Malaysia (Malaya)	1966	(*c*)1.1	37.3	7.6	(*c*)50.0	1956–58	17.9	17.2
Hong Kong	1967	n.a.	23.0	5.1	25.6	1961	15.7	14.2
Israel	1966	7.9	25.5	6.3	25.3	(*p*)1965	14.2	13.7
Jordan	1959–63	(*i*)7.8	47	16	(*i*)36.3	1959–63	19.0	19.2
Singapore	1967	6.3	(*i*)29.8	(*i*)5.5	(*i*)25.8	n.a.	n.a.	n.a.
Europe—								
Germany, Federal Republic of	1967	8.0	17.3	11.2	(*h*)23.5	1964–65	14.8	13.6
United Kingdom of Great Britain and Northern Ireland	1967	8.0	17.5	11.2	18.8	1963–65	14.7	13.5
England and Wales	1967	8.0	17.2	11.2	19.0	1963–65	14.6	13.4
Northern Ireland	1967	7.3	22.4	9.8	23.4	1964–66	14.8	13.7
Scotland	1967	8.1	18.6	11.5	21.0	1964–66	15.0	13.8
Italy	1967	7.3	18.1	9.7	(*i*)34.3	1960–62	14.9	13.8
France	1967	6.9	16.8	10.8	17.1	1965	14.7	13.3
Spain	1967	7.2	21.1	8.7	33.2	1960	14.9	13.9
Poland	1967	7.4	16.3	7.7	38.0	1960–61	15.4	14.2
Yugoslavia	1967	8.5	19.5	8.7	(*i*)61.3	1961–62	16.0	15.2
Romania	1967	8.0	27.1	9.3	46.8	1963	15.3	14.2
Czechoslovakia	1966	8.1	15.6	10.0	23.7	1964	14.8	13.6
Netherlands	1967	9.1	18.9	7.9	(*i*)14.7	1961–65	14.1	13.2
Hungary	1967	9.4	14.5	10.7	(*i*)38.4	1964	14.9	13.9
Belgium	1967	7.0	15.2	12.2	23.7	1959–63	14.8	13.6
Portugal	1967	8.4	21.1	10.0	59.3	1959–62	16.5	15.1
Greece	1967	8.6	18.5	8.3	34.7	1960–62	14.8	14.1
Bulgaria	1967	8.7	15.0	9.0	32.9	1960–62	14.7	14.0
Sweden	1967	7.4	15.5	10.1	(*i*)12.6	1961–65	14.0	13.2
Austria	1967	7.7	17.4	13.0	26.4	1966	15.0	13.6
Switzerland	1967	7.4	17.7	9.0	(*c*)17.8	1958–63	14.6	13.5
Denmark	1966	8.6	18.4	10.3	16.9	1964–65	14.2	13.4
Finland	1967	8.8	16.5	9.4	(*i*)15.0	1956–60	15.4	14.0
Norway	1967	7.3	18.0	9.2	(*c*)16.8	1961–65	14.1	13.2
Ireland	1967	(*i*)5.8	21.1	10.7	24.4	1960–62	14.7	13.9
Albania	1966	6.8	34.0	8.6	86.8	1960–61	15.7	15.2
Oceania—								
Australia	1968	8.8	20.0	9.1	17.8	1960–62	14.7	13.5
New Zealand	1967	8.6	22.4	8.4	18.0	1960–62	14.6	13.6
U.S.S.R.—								
Union of Soviet Socialist Republics	1967	9.0	17.4	7.6	26.0	1964–65	15.2	13.5

(*a*) Crude marriage, birth and death rates, i.e. number of marriages, births and deaths per 1,000 of population. Infant mortality—number of deaths of children under one year of age per 1,000 live births. (*b*) Number of deaths per 1,000 males and 1,000 females respectively in stationary population (*see* explanation on pp. 184–5). (*c*) 1965. (*d*) Estimated. (*e*) African population only. (*f*) 1954. (*g*) 1950. (*h*) 1967. (*i*) 1966. (*j*) Excluding Indian jungle population. (*k*) 1958. (*l*) 1962–65. (*m*) 1964. (*n*) Excludes live born infants dying before registration of birth. (*o*) 1963. (*p*) Jewish population.

CHAPTER 9

HOUSING AND BUILDING

Pages 207–14 of this chapter give details of the *characteristics of dwellings as obtained from censuses*, pages 214–26 contain a *summary of building activities*, pages 226–36 outline *government activities in the field of housing*, and pages 236 on relate to *financial arrangements associated with the erection or purchase of homes.*

Further information on dwellings obtained from censuses is available in the detailed tables of the 1961 census and earlier censuses and in the mimeographed statements of the 1966 census (*see* the chapter Miscellaneous of this Year Book).

More detailed information on building activity is contained in the annual bulletin *Building and Construction* and the *Quarterly Bulletin of Building Statistics*, and current information is obtainable also in the *Quarterly Summary of Australian Statistics*, the *Monthly Review of Business Statistics*, the *Digest of Current Economic Statistics*, and the mimeographed statements *Building Statistics: Number of New Houses and Flats* (quarterly), and *Building Approvals* (monthly). Details for particular States are available from publications issued regularly by the Deputy Commonwealth Statisticians.

Commonwealth Government activities relate in the main to the provision of moneys to State Governments under Commonwealth-State Housing Agreements, to the assistance of ex-service personnel in the erection and purchase of homes, to assistance to young married couples under the Home Savings Grant Act, to the operation of the Housing Loans Insurance Corporation, and to the provision of homes in the Territories. Further details of activities of the Commonwealth and State Housing Authorities are shown in the reports issued by these authorities.

Census dwellings

At each census of the population, in addition to the questions relating to personal particulars, there have been a number of questions relating to dwellings. A 'dwelling' is defined as any habitation occupied by a household group living together as a domestic unit, whether comprising the whole or only part of a building, and includes, *in addition to houses and flats*, a great variety of dwellings ranging from a single-roomed shack to a multi-roomed hotel or institution. This section contains particulars of such information on dwellings as is available from the 1966 census, together with information from earlier censuses. All statistics in this section are exclusive of particulars of dwellings occupied solely by Aborigines.*

Number of dwellings

The following table shows the number of occupied and unoccupied dwellings in Australia at each census from 1911 to 1966. Occupied dwellings are classified into 'private' and 'other than private' dwellings (*see* page 208) for definitions of 'private' and 'other than private' dwellings). Unoccupied dwellings include dwellings whose occupants are temporarily absent, holiday homes, and other temporarily vacant dwellings (*see* page 214 for full explanation of the term 'unoccupied').

DWELLINGS: AUSTRALIA, CENSUSES, 1911 TO 1966

	Occupied			
Census	*Private*	*Other than private*	*Total*	*Un-occupied*
1911 . . .	894,389	29,070	923,459	33,473
1921 . . .	1,107,010	46,275	1,153,285	51,163
1933 . . .	1,509,671	37,705	1,547,376	68,772
1947 . . .	1,873,623	34,272	1,907,895	47,041
1954 . . .	2,343,421	36,932	2,380,353	112,594
1961 . . .	2,781,945	35,325	2,817,270	194,114
1966 . . .	3,151,926	33,730	3,185,656	263,873

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* *See* page 66 for results of *Constitution Alteration (Aboriginals)* 1967 Referendum.

The following table shows the number of occupied and unoccupied dwellings in the urban and rural areas of Australia at the census of 30 June 1966. For definitions of 'urban' and 'rural' *see* this Year Book, page 123.

DWELLINGS: URBAN AND RURAL, AUSTRALIA, CENSUS 30 JUNE 1966

	Occupied				*Unoccupied*	
			Total			
Division	*Private*	*Other than private*	*Number*	*Percentage of total*	*Number*	*Percentage of total*
Urban—						
Metropolitan	1,886,055	14,287	1,900,342	59.65	86,826	32.90
Other	778,681	9,500	788,181	24.73	81,748	30.95
Rural	487,190	9,943	497,133	15.61	95,299	36.15
Total	**3,151,926**	**33,730**	**3,185,656**	**100.00**	**263,873**	**100.00**

The total numbers of occupied and unoccupied dwellings in each State and Territory at the censuses of 1961 and 1966 were as follows.

DWELLINGS: STATES AND TERRITORIES, CENSUSES 1961 AND 1966

	Census 30 June 1961		*Census 30 June 1966*	
State or Territory	*Occupied*	*Un-occupied*	*Occupied*	*Un-occupied*
New South Wales	1,061,609	72,432	1,189,539	101,546
Victoria	790,529	47,389	888,984	64,757
Queensland	398,233	33,969	449,169	41,818
South Australia	261,908	17,061	302,314	25,110
Western Australia	194,317	13,705	224,663	17,965
Tasmania	91,258	8,582	99,366	10,800
Northern Territory	5,479	179	8,067	380
Australian Capital Territory	13,937	797	23,554	1,497
Australia	**2,817,270**	**194,114**	**3,185,656**	**263,873**

Class of dwelling (1961 and 1966)

The following table shows the numbers of the various classes of occupied dwellings in the metropolitan urban, other urban, and rural areas of Australia at the censuses of 1961 and 1966. The 1961 dwellings data in the following table have not been compiled for the separate divisions of State according to criteria adopted at the 1966 census (*see* page 123), and consequently accurate comparison between 1961 and 1966 figures for divisions of State cannot be made. The numbers of the various classes of dwelling for each State and Territory at the 1966 census are given in the table on page 209.

Private dwellings are classified into the following categories:

private house—includes houses, sheds, huts, garages, etc., used for dwelling purposes;

share of private house—portion of a shared private house which is occupied separately and for which portion a separate householder's schedule was received;

flat—part of a house or other building which can be completely closed off and which has its own cooking and bathing facilities;

other private dwelling—includes private dwellings such as rooms, apartments, etc., which are parts of buildings but are not self-contained units.

Other than private dwellings includes hotels; motels; boarding houses, lodging houses and hostels; educational, religious and charitable institutions; hospitals; defence and penal establishments; police and fire stations; clubs; staff barracks and quarters, etc.

OCCUPIED DWELLINGS, BY CLASS: URBAN AND RURAL(*a*), AUSTRALIA CENSUSES, 1961 AND 1966

	Census, 30 June 1961		*Census, 30 June 1966*					
			Urban					
Class of dwelling	*Total*	*Percentage of total occupied dwellings*	*Metropolitan*	*Other*	*Rural*	*Total*	*Percentage of total occupied dwellings*	*Intercensal increase or decrease*
Private dwellings—								
Private house	2,393,169	84.95	1,529,059	692,742	459,924	2,681,725	84.18	288,556
Share of private house	79,550	2.82	(*b*)20,940	(*b*)3,682	(*b*)1,292	25,914	0.81	−53,636
Self-contained flat	217,586	7.72	274,367	63,338	7,880	345,585	10.85	129,167
Share of self-contained flat	(*c*)	(*c*)	(*d*)956	(*d*)193	(*d*)19	1,168	0.04	(*c*)
Shed, hut, tent, etc.	41,997	1.49	5,084	9,541	16,431	31,056	0.97	−10,941
Other private dwellings	49,643	1.76	55,649	9,185	1,644	66,478	2.09	16,835
Total private dwellings	*2,781,945*	*98.75*	*1,886,055*	*778,681*	*487,190*	*3,151,926*	*98.94*	*369,981*
Non-private dwellings(*e*)	35,325	1.25	14,287	9,500	9,943	33,730	1.06	−1,595
Total occupied dwellings	2,817,270	100.00	1,900,342	788,181	497,133	3,185,656	100.00	368,386

(*a*) *See* text on page 208 regarding comparability between censuses. (*b*) Represents 10,077 private houses in metropolitan areas, 1,799 in other urban areas and 637 in rural areas. (*c*) At the 1961 Census share of self-contained flat was not separately identified. In cases where more than one household group were occupying a self-contained flat they were counted as one household group occupying a self-contained flat. (*d*) Represents 460 self-contained flats in metropolitan areas, 93 in other urban areas and 9 in rural areas. (*e*) Details of the number of each of the types of non-private dwellings are available on request. Minus sign (−) denotes decrease.

OCCUPIED DWELLINGS, BY CLASS: STATES AND TERRITORIES CENSUS, 30 JUNE 1966

Class of dwelling	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Australia*
Private dwellings—									
Private house	961,077	752,776	381,681	271,045	200,900	88,780	5,817	19,649	2,681,725
Share of private house	11,496	9,166	1,586	2,140	844	469	43	170	25,914
Self-contained flat	164,380	92,166	43,069	20,802	14,074	7,036	838	3,220	345,585
Share of self-contained flat	666	277	104	61	18	22	5	15	1,168
Shed, hut, tent, etc.	12,309	3,725	7,952	1,938	3,439	882	616	195	31,056
Other private dwellings	28,194	23,338	7,759	3,644	2,169	1,093	180	101	66,478
Total private dwellings	*1,178,122*	*881,448*	*442,151*	*299,630*	*221,444*	*98,282*	*7,499*	*23,350*	*3,151,926*
Non-private dwellings	*11,417*	*7,536*	*7,018*	*2,684*	*3,219*	*1,084*	*568*	*204*	*33,730*
Total occupied dwellings	1,189,539	888,984	449,169	302,314	224,663	99,366	8,067	23,554	3,185,656

Population according to class of dwelling, etc. (1961 and 1966)

The following table shows the number of the various classes of occupied dwellings at the censuses of 1961 and 1966, together with the number of inmates therein.

OCCUPIED DWELLINGS AND INMATES, BY CLASS OF DWELLING: AUSTRALIA CENSUSES, 1961 AND 1966

	Census, 30 June 1961		*Census, 30 June 1966*					
			Urban					
	Total	*Percentage of total population*	*Metropolitan*	*Other*	*Rural*	*Total*	*Percentage of total population*	*Intercensal increase or decrease*
Persons enumerated in—								
Private dwellings—								
Private house	8,881,128	84.51	5,581,258	2,498,683	1,743,079	9,823,020	85.04	941,892
Share of private house	224,066	2.13	59,943	10,276	4,561	74,780	0.65	−149,286
Self-contained flat	552,596	5.26	646,184	163,638	23,893	833,715	7.22	283,648
Share of self-contained flat	(*a*)	(*a*)	2,060	425	44	2,529	0.02	(*a*)
Shed, hut, tent, etc.	116,458	1.11	13,435	24,380	38,871	76,686	0.66	−39,772
Other private dwellings	96,246	0.92	97,315	18,475	3,980	119,770	1.04	23,524
Total private dwellings	*9,870,494*	*93.93*	*6,400,195*	*2,715,877*	*1,814,428*	*10,930,500*	*94.63*	*1,060,006*
Non-private dwellings	*596,412*	*5.68*	*313,752*	*174,535*	*97,176*	*585,463*	*5.07*	*−10,949*
Total occupied dwellings	10,466,906	99.61	6.713,947	2,890,412	1,911,604	11,515,963	99.71	1,049,057
Persons not enumerated in dwellings—								
Campers out	15,994	0.15	1,050	7,101	6,661	14,812	0.13	−1,182
Migratory(*b*)	25,286	0.24	..	..	..	19,687	0.17	−5,599
Total population	10,508,186	100.00	6,714,997	2,897,513	1,918,265	11,550,462	100.00	1,042,276

(*a*) At the 1961 Census share of a self-contained flat was not separately identified. (*b*) Shipping, railway and air travellers. Minus sign (−) denotes decrease.

Occupied private dwellings

The tables on pages 210–4 shows **houses and flats** classified according to material of outer walls; nature of occupancy; facilities; and number of motor vehicles. Details of number of rooms and number of inmates are shown for **occupied private dwellings.**

Material of outer walls (1961 and 1966)

OCCUPIED PRIVATE HOUSES AND SELF-CONTAINED FLATS, BY MATERIAL OF OUTER WALLS: AUSTRALIA, CENSUSES, 1961 AND 1966

	Census, 30 June 1961				*Census, 30 June 1966*			
Material of outer walls	*Houses*	*Percentage of total*	*Self-contained flats*	*Percentage of total*	*Houses*	*Percentage of total*	*Self-contained flats*	*Percentage of total*
Brick	743,426	31.06	144,209	66.28	674,286	25.14	224,947	65.09
Brick veneer(*a*)	(*b*)	(*b*)	(*b*)	(*b*)	262,150	9.78	16,250	4.70
Stone	71,476	2.99	5,904	2.71	68,898	2.57	6,514	1.88
Concrete	62,839	2.63	9,226	4.24	68,144	2.54	17,670	5.11
Wood	1,056,180	44.13	38,862	17.86	1,076,435	40.14	50,260	14.54
Iron, tin	35,930	1.50	984	0.45	28,364	1.06	1,169	0.34
Fibro-cement	411,960	17.21	17,675	8.12	495,284	18.47	28,559	8.26
Other	10,165	0.42	349	0.16	8,164	0.30	216	0.06
Not stated	1,193	0.05	377	0.17	(*c*)	(*c*)	(*c*)	(*c*)
Total	**2,393,169**	**100.00**	**217,586**	**100.00**	**2,681,725**	**100.00**	**345,585**	**100.00**

(*a*) So described in individual Census Schedules. (*b*) At the 1961 Census, dwellings with walls of brick veneer were not separately identified and for tabulation purposes were included with brick walled dwellings. (*c*) In the small number of cases where material of outer walls was not stated a material was selected during processing of the 1966 census schedules. Selection was based upon the answer given for the geographically nearest dwelling of the same class as the dwelling for which material of outer walls was not stated.

Number of rooms (1961 and 1966)

OCCUPIED PRIVATE DWELLINGS, BY NUMBER OF ROOMS AND CLASS OF DWELLING AUSTRALIA, CENSUSES, 1961 AND 1966

CENSUS, 30 JUNE 1961

	Class of dwelling					
Number of rooms per dwelling(a)	*Private house*	*Share of private house*	*Self-contained flat*	*Share of self-contained flat(b)*	*Other*	*Total private dwellings*
1	1,179	6,941	2,282	..	29,430	39,832
2	17,000	17,606	20,635	..	31,251	86,492
3	63,849	21,280	53,585	..	16,828	155,542
4	384,691	16,524	77,531	..	6,582	485,328
5	902,466	11,906	39,914	..	1,985	956,271
6	656,239	2,168	15,723	..	354	674,484
7	231,806	609	4,471	..	132	237,018
8	80,889	230	1,674	..	67	82,860
9	28,064	70	572	..	34	28,740
10	12,766	44	83	..	21	12,914
11 and over	11,415	53	77	..	32	11,577
Not stated	2,805	2,119	1,039	..	4,924	10,887
Total private dwellings	**2,393,169**	**79,550**	**217,586**	..	**91,640**	**2,781,945**
Average number of rooms per dwelling	5.44	3.26	3.97	..	2.11	5.16

For footnotes *see* next page.

OCCUPIED PRIVATE DWELLINGS, BY NUMBER OF ROOMS AND CLASS OF DWELLING AUSTRALIA, CENSUSES, 1961 AND 1966—*continued*

CENSUS, 30 JUNE 1966

Number of rooms per dwelling(a)	*Class of dwelling* *Private house*	*Share of private house*	*Self-contained flat*	*Share of self-contained flat*	*Other*	*Total private dwellings*
1	2,194	2,036	7,803	187	38,511	50,731
2	14,925	5,649	50,851	358	31,071	102,854
3	62,605	6,983	93,579	331	15,735	179,233
4	369,127	4,850	113,611	170	6,017	493,775
5	1,055,571	3,258	50,894	76	2,746	1,112,545
6	697,115	1,827	18,744	28	1,559	719,273
7	305,770	853	6,104	8	845	313,580
8	105,955	287	2,334	9	492	109,077
9	37,447	94	806	1	206	38,554
10	16,574	50	401	..	123	17,148
11 and over	14,442	27	458	..	229	15,156
Not stated						
Total private dwellings	**2,681,725**	**25,914**	**345,585**	**1,168**	**97,534**	**3,151,926**
Average number of rooms per dwelling	5.53	3.51	3.74	2.79	2.23	5.21

(*a*) Includes kitchen and permanently enclosed sleep-out but does not include bathroom, pantry, laundry or storehouse.
(*b*) At the 1961 Census, share of a self-contained flat was not separately identified.

Number of inmates (1961 and 1966)

OCCUPIED PRIVATE DWELLINGS, BY CLASS AND NUMBER OF INMATES, AUSTRALIA CENSUSES, 1961 AND 1966

CENSUS, 30 JUNE 1961

Number of inmates per dwelling	*Class of dwelling* *Private house*	*Share of private house*	*Self-contained flat*	*Share of self-contained flat(a)*	*Other*	*Total private dwellings*
1	182,712	17,215	46,890	..	38,543	285,360
2	529,566	23,572	82,194	..	23,161	658,493
3	460,211	16,176	43,051	..	11,951	531,389
4	506,916	11,371	26,638	..	8,366	553,291
5	353,554	5,801	11,571	..	4,584	375,510
6	194,386	2,940	4,476	..	2,441	204,243
7	90,374	1,367	1,779	..	1,211	94,731
8	43,454	765	683	..	733	45,635
9	17,002	204	173	..	307	17,686
10	7,871	69	70	..	160	8,170
11 and over	7,123	70	61	..	183	7,437
Total private dwellings	**2,393,169**	**79,550**	**217,586**	..	**91,640**	**2,781,945**
Total inmates	8,881,128	224,066	552,596	..	212,704	9,870,494
Average number of inmates per dwelling	3.71	2.82	2.54	..	2.32	3.55

(*a*) At the 1961 census, share of a self-contained flat was not separately identified.

OCCUPIED PRIVATE DWELLINGS, BY CLASS AND NUMBER OF INMATES, AUSTRALIA CENSUSES, 1961 AND 1966—*continued*

CENSUS, 30 JUNE 1966

Number of inmates per dwelling	*Class of dwelling* *Private house*	*Share of private house*	*Self-contained flat*	*Share of self-contained flat*	*Other*	*Total private dwellings*
1	231,003	5,783	86,755	449	47,871	371,861
2	611,918	7,088	134,162	376	25,510	779,054
3	499,751	5,124	62,249	172	11,255	578,551
4	553,694	3,815	36,477	106	6,654	600,746
5	388,766	2,030	15,844	27	3,199	409,866
6	214,580	1,066	6,200	21	1,550	223,417
7	99,275	580	2,427	11	759	103,052
8	48,169	338	1,000	5	420	49,932
9	18,284	52	288	..	139	18,763
10	8,474	20	104	1	94	8,693
11 and over	7,811	18	79	..	83	7,991
Total private dwellings	**2,681,725**	**25,914**	**345,585**	**1,168**	**97,534**	**3,151,926**
Total inmates	9,823,020	74,780	833,715	2,529	196,456	10,930,500
Average number of inmates per dwelling	3.66	2.89	2.41	2.17	2.01	3.47

Nature of occupancy (1961 and 1966)

OCCUPIED PRIVATE HOUSES AND SELF-CONTAINED FLATS, BY NATURE OF OCCUPANCY AUSTRALIA, CENSUSES(*a*), 1961 AND 1966

Nature of occupancy	*Census, 30 June 1961*		*Census, 30 June 1966*					*Inter-censal increase or decrease*
			Urban					
	Total	*Percentage of private houses and flats*	*Metro-politan*	*Other*	*Rural*	*Total*	*Percentage of private houses and flats*	
PRIVATE HOUSES								
Owner Purchaser by instalments	1,847,201	77.19	1,264,312	525,768	333,644	2,123,724	79.19	276,523
Tenant of government authority	99,610	4.16	82,966	45,718	4,313	132,997	4.96	33,387
Other tenant	388,128	16.22	163,886	107,413	89,677	360,976	13.46	−27,152
Other methods of occupancy	49,420	2.07	11,531	10,122	26,379	48,032	1.79	−1,388
Not stated	8,810	0.37	6,364	3,721	5,911	15,996	0.60	7,186
Total	2,393,169	100.00	1,529,059	692,742	459,924	2,681,725	100.00	288,556
SELF-CONTAINED FLATS								
Owner Purchaser by instalments	43,527	20.00	61,075	9,127	2,509	72,711	21.04	29,184
Tenant of government authority	13,925	6.40	23,487	3,757	102	27,346	7.91	13,421
Other tenant	155,110	71.29	184,398	48,495	4,543	237,436	68.71	82,326
Other methods of occupancy	4,336	1.99	3,509	1,496	639	5,644	1.63	1,308
Not stated	688	0.32	1,898	463	87	2,448	0.71	1,760
Total	217,586	100.00	274,367	63,338	7,880	345,585	100.00	127,999

(*a*) *See* text on page 208 regarding comparability between censuses.

Minus sign (—) denotes decrease.

At the 1961 census persons paying interest only on a mortgage on the dwelling were instructed to enter 'owner', but a person buying a house by regular payments including interest and principal was instructed to enter 'purchaser by instalment'. It is probable, however, that some 'purchasers by instalment' described themselves on 1961 census schedules as 'owners' especially where they possessed the title to the property. However, the extent of such mis-statements has not been measured. At the 1966 census, as the two categories can be logically grouped, separate details for 'owners' and 'purchasers by instalment' were not collected.

Facilities (1961 and 1966)

OCCUPIED PRIVATE HOUSES AND SELF-CONTAINED FLATS, BY FACILITIES URBAN AND RURAL: AUSTRALIA, CENSUSES, 1961 AND 1966

Facilities	*Census 30 June 1961 Total*	*Census, 30 June 1966*			
		Urban			
		Metropolitan	*Other*	*Rural*	*Total*
PRIVATE HOUSES					
With gas only	5,386	1,186	531	3,474	5,191
With electricity only	1,322,300	629,517	504,160	371,793	1,505,470
With gas and electricity	1,008,763	894,797	183,602	61,462	1,139,861
Neither gas nor electricity	87,839	923	2,853	19,721	23,497
Not stated	10,878	2,636	1,596	3,474	7,706
Total	**2,435,166**	**1,529,059**	**692,742**	**459,924**	**2,681,725**
With television set	1,139,578	1,350,203	517,717	286,401	2,154,321
SELF-CONTAINED FLATS					
With gas only	171	385	67	33	485
With electricity only	63,378	81,035	40,619	6,407	128,061
With gas and electricity	153,231	191,398	22,180	1,296	214,874
Neither gas nor electricity	277	89	90	92	271
Not stated	529	1,460	382	52	1,894
Total	**217,586**	**274,367**	**63,338**	**7,880**	**345,585**
With television set	97,226	197,052	33,768	4,263	235,083

NOTE. Dwellings for which electricity was not stated but which had television have been classified as having electricity and therefore included as such in this table.

Number of motor vehicles (1966)

At the 1966 census a question was asked regarding the number of motor vehicles parked or garaged at occupied private dwellings on census night. No information was collected on this topic at previous censuses.

OCCUPIED PRIVATE HOUSES AND SELF-CONTAINED FLATS, BY NUMBER OF MOTOR VEHICLES, URBAN AND RURAL, AUSTRALIA
CENSUS, 30 JUNE 1966

Number of vehicles per occupied private house and self-contained flat	*Urban*				*Rural*		*Total*	
	Metropolitan		*Other*					
	Houses	*Flats*	*Houses*	*Flats*	*Houses*	*Flats*	*Houses*	*Flats*
No vehicles . .	361,185	110,162	146,098	19,395	48,968	1,464	556,251	131,021
1 vehicle . .	797,335	126,576	385,300	33,846	217,306	4,504	1,399,941	164,926
2 vehicles . .	280,766	20,366	120,223	5,849	116,541	1,249	517,530	27,464
3 vehicles . .	47,659	2,776	21,517	1,023	45,612	284	114,788	4,083
4 or more vehicles .	9,711	767	5,967	382	23,158	112	38,836	1,261
Not stated . .	32,403	13,720	13,637	2,843	8,339	267	54,379	16,830
Total occupied private houses and self-contained flats	**1,529,059**	**274,367**	**692,742**	**63,338**	**459,924**	**7,880**	**2,681,725**	**345,585**
Total vehicles	1,543,427	179,176	716,968	50,397	692,082	8,365	2,952,477	237,938

Unoccupied dwellings (1961 and 1966)

The following table classifies unoccupied dwellings according to the reasons given by census collectors for the dwellings being unoccupied at the census date. Unoccupied dwellings include vacant dwellings available for sale or renting; dwellings such as 'week-ender', 'holiday home', 'second home', 'seasonal workers' quarters', which were not occupied on the night of the census; dwellings normally occupied, but whose usual occupants were temporarily absent on the night of the census; newly completed dwellings whose owners or tenants had not entered into occupation on the night of the census; dwellings described as 'to be demolished', 'condemned', 'deceased estate', 'exhibition home', etc.; and buildings constructed as dwellings but used for non-dwelling purposes on the night of the Census. The total number of unoccupied dwellings shown for any area does not, therefore, represent the number of vacant houses and flats available for sale or renting.

UNOCCUPIED DWELLINGS, BY CLASS: URBAN AND RURAL, AUSTRALIA
CENSUSES, 1961 AND 1966

Class of dwelling	*Census 30 June 1961 Total*	*Census, 30 June 1966*			
		Urban		*Rural*	*Total*
		Metropolitan	*Other*		
Private house	156,473	55,636	66,363	79,148	201,147
Self-contained flat	21,887	26,922	11,923	1,397	40,242
Other private dwellings(*a*) . .	7,073	4,157	3,133	8,881	16,171
Non-private dwellings(*a*) . .	1,443	111	329	5,873	6,313
Not stated	7,238	. .	. .	. .	. .
Total unoccupied dwellings . .	**194,114**	**86,826**	**81,748**	**95,299**	**263,873**

(*a*) The inter-censal increase in unoccupied other private and non-private dwellings is mainly the result of a better coverage at the 1966 Census of dwellings occupied for only a short period of time each year, such as shearers' huts, seasonal workers' quarters, etc.

Building

Statistics of building approved

Statistics of building approvals have been compiled since the year 1953–54 from (*a*) permits issued by local government authorities in the areas subject to building control by these authorities, and (*b*) contracts let or work commenced and day labour projects authorised by governmental authorities. *They relate only to approvals for buildings as distinct from the construction of roads, railways, bridges, earthworks, water storage, etc.* Values shown represent the estimated cost when completed (excluding cost of land) of new buildings and alterations and additions to existing buildings. Before 1 July 1966 additions of $10,000 and over were included with new buildings in all States except New South Wales, where they were included in 'alterations and additions'. From 1 July 1966 alterations and or additions of $10,000 and over are included with new buildings in all States.

Statistics of building commenced, completed and under construction

These relate to building by private contractors, government authorities and owner-builders. The following outlines the scope of the statistics: (*a*) *only the erection of new buildings as distinct from the construction of roads, railways, bridges, earthworks, water storages, etc., is covered;* (*b*) before 1 July 1966 major new additions to existing buildings in all States and major alterations in New South Wales were included with new buildings, while from 1 July 1966 alterations and or additions of $10,000 and over are included with new buildings in all States; (*c*) minor additions, alterations, renovations and repairs are excluded because of the difficulty of obtaining details of this work; (*d*) temporary dwellings, sheds, huts, etc., are excluded; (*e*) figures for houses exclude flats and dwellings attached to other new buildings (the value of dwellings attached to other new buildings is included with the value of buildings to which they are attached); figures for flats include 'home units'; (*f*) imported prefabricated houses are included; (*g*) details obtained from government authorities and building contractors refer to all areas, whereas details for owner-builders cover only areas subject to building control by local government authorities.

The following definitions of terms used in this section are necessary for interpretation of the data presented.

Private or government ownership. A building is classified as 'private' or 'government' according to ownership at date of commencement. Thus 'government' includes buildings erected for Commonwealth and State Governments, semi-governmental and local government authorities, either by contractor or by day-labour, whether these buildings are for their own use or for rental or sale after completion. Houses erected *for particular persons* under government-sponsored home building schemes or with government financial assistance are classified as 'private'.

Owner-built. An 'owner-built' house is one actually erected or being erected by the owner or under the owner's direction without the services of a contractor who is responsible for the whole job.

Contract-built. Includes the operations of all building contractors and government authorities which undertake the erection of new buildings.

Commenced. A building is regarded as having been commenced when work on foundations has begun. Owing to the difficulty of defining the exact point that this represents in building operations, classifications made by informants may not be entirely uniform.

Completed. A building is regarded as having been completed when the contractor has fulfilled the terms of the contract. As with commencements, the classifications made may not be entirely uniform.

Under construction. A building is regarded as being under construction if it has been commenced but not completed, whether or not work on the building is actively proceeding.

Values. All values shown exclude the value of land and represent the estimated value of buildings on completion.

Values of work done. The values of work done during the period represent the estimated value of work actually carried out on buildings during the period. For any building the sum of these values obtained during its construction equals the value of the building on completion. Data relating to the value of work done on owner-built houses are not collected. However, the figures shown for the value of work done include a component relating to owner-built houses calculated on the basis of the figures collected for the value of owner-built houses commenced, completed and under construction.

Type of building. Classification is according to the function a building is intended to serve. A building which is ancillary to other buildings or forms part of a group of related buildings is classified according to the function of the group as a whole.

Persons working. Figures relate to persons working on the jobs of contractors who undertake the erection of new buildings and of government authorities which erect new buildings on their own account. They include persons working on alterations, additions, repairs and maintenance when these jobs are undertaken by such contractors and authorities. Contractors are asked to give details of all persons working on their jobs *on a specified day*, including working principals, men working as or for sub-contractors and men temporarily laid off on account of weather. Because of the intermittent employment of various types of sub-contractors on any particular job, it is sometimes difficult for contractors and authorities to provide precise particulars of the number of sub-contractors and the number of employees of sub-contractors working on their jobs on the specified day. This factor may cause some estimation by persons completing returns and some degree of understatement in figures shown in tables. On the other hand, because of frequent movement between jobs of some types of tradesmen (such as electricians) who may work on several jobs on the one day, a small element of duplication may occur. The figures *exclude* persons working on owner-built houses, and employees of builders who undertake only alterations, additions, repairs and maintenance.

New houses approved, commenced, completed and under construction

The next table provides a summary for 1967–68 of the number of new houses approved, commenced, completed and under construction in each State and Territory. For a graph showing the number of new houses commenced, completed and under construction for the period 1958–59 to 1967–68 *see* plate 24, page 219.

NEW HOUSES: NUMBER, STATES AND TERRITORIES, 1967-68

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Approved . . .	29,351	22,318	13,452	5,867	11,919	3,309	807	1,964	88,987
Commenced . .	26,205	21,908	13,288	6,752	11,472	3,142	763	2,389	85,919
Completed . .	27,270	21,592	13,098	7,444	9,858	3,331	699	2,464	85,756
Under construction at end of year . .	11,499	10,713	3,650	3,151	5,123	1,538	621	1,201	37,496

The following table shows the number of *new houses approved* in each State or Territory, according to *private and government ownership*, during the years 1963–64 to 1967–68.

NEW HOUSES APPROVED, BY OWNERSHIP: NUMBER, STATES AND TERRITORIES 1963-64 TO 1967-68

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
PRIVATE									
1963–64	24,926	22,417	9,333	8,025	5,571	2,064	130	995	73,461
1964–65	24,685	20,301	10,269	7,289	5,512	2,062	203	1,189	71,510
1965–66	23,481	18,572	10,376	6,687	5,537	1,837	84	1,318	67,892
1966–67	23,666	20,068	11,331	5,495	7,127	2,500	91	1,458	71,736
1967–68	26,478	20,998	11,958	4,925	10,030	2,393	131	1,374	78,287
GOVERNMENT									
1963–64	5,243	2,301	1,643	4,085	1,876	584	333	569	16,634
1964–65	4,082	2,207	1,460	2,519	2,058	607	571	854	14,358
1965–66	3,116	1,889	1,526	2,470	1,892	591	492	709	12,685
1966–67	4,737	1,602	1,804	1,632	1,585	718	428	1,155	13,661
1967–68	2,873	1,320	1,494	942	1,889	916	676	590	10,700
TOTAL									
1963–64	30,169	24,718	10,976	12,110	7,447	2,648	463	1,564	90,095
1964–65	28,767	22,508	11,729	9,808	7,570	2,669	774	2,043	85,868
1965–66	26,597	20,461	11,902	9,157	7,429	2,428	576	2,027	80,577
1966–67	28,403	21,670	13,135	7,127	8,712	3,218	519	2,613	85,397
1967–68	29,351	22,318	13,452	5,867	11,919	3,309	807	1,964	88,987

The number of *new houses commenced* in each State and Territory *by contractors and owner-builders* during the years 1963–64 to 1967–68 is shown in the following table.

NEW HOUSES COMMENCED, CONTRACT-BUILT OR OWNER-BUILT
NUMBER, STATES AND TERRITORIES, 1963-64 TO 1967-68

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
				CONTRACT-BUILT(*a*)					
1963–64	23,545	20,873	8,917	11,014	6,448	1,756	395	1,561	74,509
1964–65	22,764	18,900	10,202	10,639	6,537	1,791	557	1,793	73,183
1965–66	20,704	17,587	10,650	8,826	6,647	1,576	484	1,945	68,419
1966–67	22,466	18,330	10,802	7,843	7,626	2,170	475	2,088	71,800
1967–68	22,530	18,858	11,913	6,311	10,282	2,181	708	2,326	75,109
				OWNER-BUILT					
1963–64	4,412	2,775	1,264	550	872	794	35	92	10,794
1964–65	3,860	2,867	1,455	581	930	755	48	117	10,613
1965–66	3,864	2,943	1,416	569	930	626	30	167	10,545
1966–67	3,362	2,760	1,504	529	913	782	91	117	10,058
1967–68	3,675	3,050	1,375	441	1,190	961	55	63	10,810
				TOTAL					
1963–64	27,957	23,648	10,181	11,564	7,320	2,550	430	1,653	85,303
1964–65	26,624	21,767	11,657	11,220	7,467	2,546	605	1,910	83,796
1965–66	24,568	20,530	12,066	9,395	7,577	2,202	514	2,112	78,964
1966–67	25,828	21,090	12,306	8,372	8,539	2,952	566	2,205	81,858
1967–68	26,205	21,908	13,288	6,752	11,472	3,142	763	2,389	85,919

(*a*) Includes operations of government authorities.

The following table shows the number of *new houses completed* in each State and Territory *by contractors and owner-builders* during the years 1963–64 to 1967–68.

NEW HOUSES COMPLETED, CONTRACT-BUILT OR OWNER-BUILT
NUMBER, STATES AND TERRITORIES, 1963-64 TO 1967-68

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
				CONTRACT-BUILT(*a*)					
1963–64	21,658	19,358	8,681	9,884	6,342	1,615	262	1,601	69,401
1964–65	22,976	19,544	10,158	10,490	6,396	1,779	424	1,673	73,440
1965–66	22,022	17,662	10,300	9,741	6,282	1,572	621	1,937	70,137
1966–67	21,216	19,149	10,675	8,739	7,398	1,850	265	1,861	71,153
1967–68	23,111	18,648	11,720	6,998	8,810	2,442	644	2,331	74,704
				OWNER-BUILT					
1963–64	4,296	3,441	1,331	604	934	896	48	163	11,713
1964–65	3,788	3,277	1,388	560	1,049	800	49	133	11,044
1965–66	3,882	3,267	1,362	612	983	688	36	129	10,959
1966–67	3,563	2,977	1,602	615	874	915	92	169	10,807
1967–68	4,159	2,944	1,378	446	1,048	889	55	133	11,052

(*a*) Includes operations of government authorities.

The number of *new houses completed* in each State and Territory during the years 1963–64 to 1967–68, according to *private and government ownership*, is shown in the following table.

NEW HOUSES COMPLETED, BY OWNERSHIP: NUMBER, STATES AND TERRITORIES, 1963-64 TO 1967-68

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
				PRIVATE					
1963–64	22,174	21,129	8,375	7,795	5,330	1,957	129	1,028	67,917
1964–65	21,935	20,781	10,117	7,873	5,612	2,000	117	1,086	69,521
1965–66	22,056	19,014	10,234	7,230	5,228	1,703	105	1,218	66,788
1966–67	21,343	19,558	10,711	6,252	6,676	2,138	153	1,336	68,167
1967–68	23,126	20,276	11,381	5,141	8,533	2,594	134	1,557	72,742
				GOVERNMENT					
1963–64	3,780	1,670	1,637	2,693	1,946	554	181	736	13,197
1964–65	4,829	2,040	1,429	3,177	1,833	579	356	720	14,963
1965–66	3,848	1,915	1,428	3,123	2,037	557	552	848	14,308
1966–67	3,436	2,568	1,566	3,102	1,596	627	204	694	13,793
1967–68	4,144	1,316	1,717	2,303	1,325	737	565	907	13,014
				TOTAL					
1963–64	25,954	22,799	10,012	10,488	7,276	2,511	310	1,764	81,114
1964–65	26,764	22,821	11,546	11,050	7,445	2,579	473	1,806	84,484
1965–66	25,904	20,929	11,662	10,353	7,265	2,260	657	2,066	81,096
1966–67	24,779	22,126	12,277	9,354	8,272	2,765	357	2,030	81,960
1967–68	27,270	21,592	13,098	7,444	9,858	3,331	699	2,464	85,756

The following tables show the number of *new houses completed* in each State and Territory during 1967–68 and in Australia during the years 1963–64 to 1967–68, classified according to the *material of their outer walls.*

NEW HOUSES COMPLETED, BY MATERIAL OF OUTER WALLS: NUMBER STATES AND TERRITORIES, 1967-68

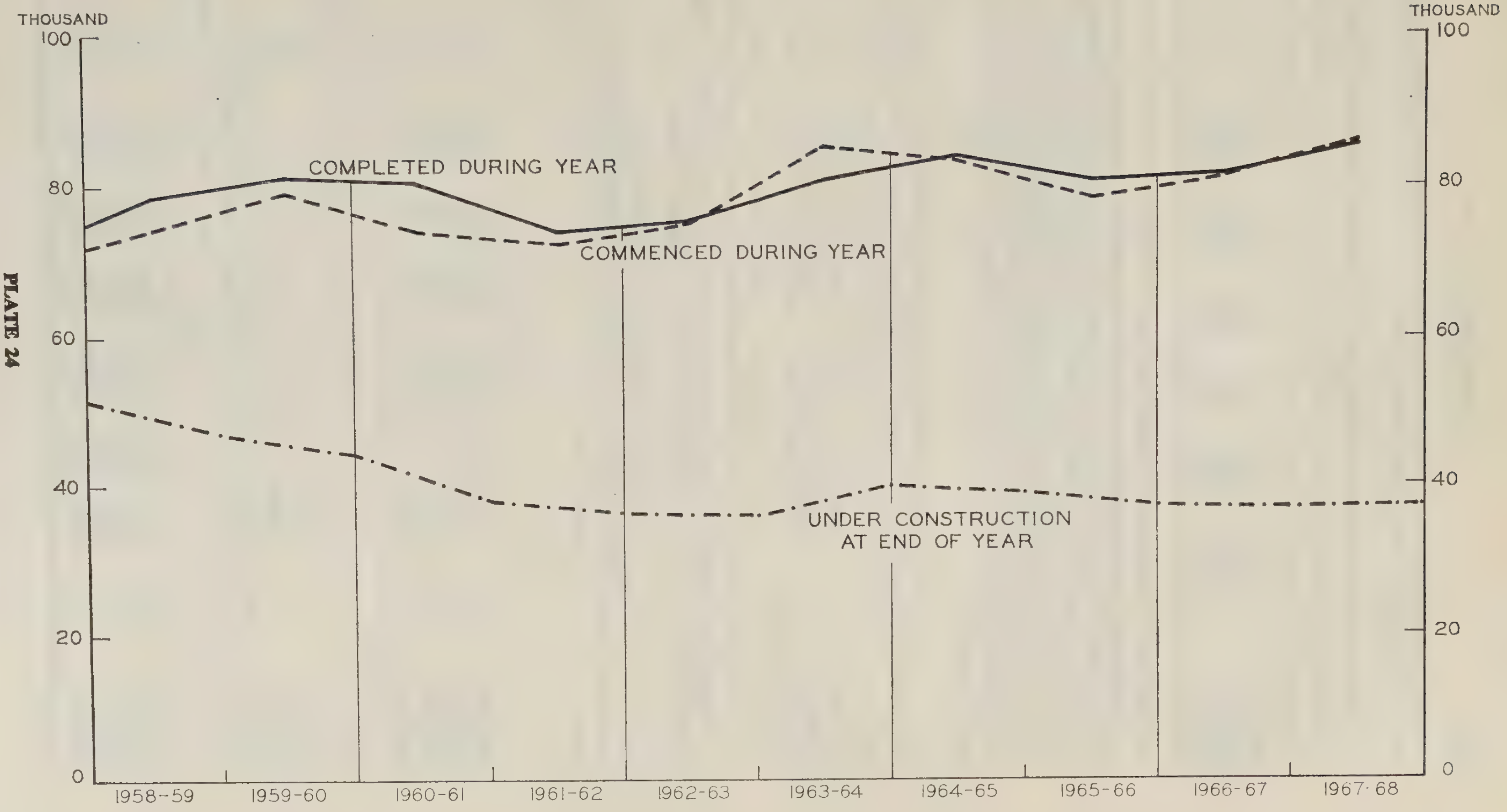
Material of outer walls	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Brick, brick veneer, concrete and stone	15,113	18,378	4,792	6,819	7,844	1,724	379	2,457	57,506
Wood (weatherboard, etc.) . .	2,957	1,522	5,720	8	24	1,395	..	7	11,633
Fibro-cement	9,040	1,433	2,387	556	1,944	207	253	..	15,820
Other	160	259	199	61	46	5	67	..	797
Total	**27,270**	**21,592**	**13,098**	**7,444**	**9,858**	**3,331**	**699**	**2,464**	**85,756**

NEW HOUSES COMPLETED, BY MATERIAL OF OUTER WALLS: NUMBER AUSTRALIA, 1963-64 TO 1967-68

Material of outer walls	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Brick, brick veneer, concrete and stone .	47,754	52,285	52,148	54,116	57,506
Wood (weatherboard, etc.) . . .	16,678	14,480	12,247	11,294	11,633
Fibro-cement	16,358	17,171	16,027	15,581	15,820
Other	324	548	674	969	797
Total	**81,114**	**84,484**	**81,096**	**81,960**	**85,756**

PLATE 24

1958-59 TO 1967-68



The number of *new houses under construction* at the end of each year 1963–64 to 1967–68 in each State and Territory is shown in the following table.

NEW HOUSES UNDER CONSTRUCTION: NUMBER, STATES AND TERRITORIES 1963-64 TO 1967-68

At end of year—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1963–64 . .	12,991	12,912	2,916	5,639	2,923	1,633	359	951	40,324
1964–65 . .	12,851	11,858	3,027	5,809	2,945	1,600	491	1,055	39,636
1965–66 . .	11,515	11,459	3,431	4,851	3,257	1,542	348	1,101	37,504
1966–67 . .	12,564	10,423	3,460	3,869	3,524	1,729	557	1,276	37,402
1967–68 . .	11,499	10,713	3,650	3,151	5,123	1,538	621	1,201	37,496

New flats approved, commenced, completed and under construction

The figures in the foregoing tables do not include particulars of new flats, and in the following tables on pages 220–1 (*a*) the figures are additional to the numbers of houses shown in other tables, (*b*) each flat is counted as a separate unit, and the numbers shown therefore relate to individual flats, (*c*) new flats only are included, i.e. conversions of old buildings into flats are omitted, and (*d*) 'home units' are included as flats. The summary following shows the number of new flats approved, commenced, completed and under construction for the year 1967–68. For a graph showing the number of new flats commenced, completed and under construction for the period 1958–59 to 1967–68 *see* plate 25, page 222.

NEW FLATS: NUMBER, STATES AND TERRITORIES, 1967–68

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Approved	18,058	16,296	2,859	1,852	3,200	425	529	36	43,255
Commenced . . .	14,369	14,399	2,997	1,561	3,172	367	305	28	37,198
Completed	14,108	12,686	3,181	1,373	2,392	292	211	171	34,414
Under construction at end of year . .	8,630	8,914	1,173	798	2,369	254	398	38	22,574

The following table shows the number of *new flats approved* in each State or Territory during the years 1963–64 to 1967–68 according to *private and government ownership.*

NEW FLATS APPROVED, BY OWNERSHIP NUMBER, STATES AND TERRITORIES, 1963-64 TO 1967-68

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
				PRIVATE					
1963–64	12,210	6,446	1,539	1,634	1,830	163	65	177	24,064
1964–65	16,337	9,418	3,132	2,488	1,718	224	90	368	33,775
1965–66	11,603	8,235	3,838	1,778	1,761	198	135	154	27,702
1966–67	12,544	11,495	3,766	1,355	2,708	209	156	190	32,423
1967–68	17,028	14,894	2,853	1,835	3,094	346	475	36	40,561
				GOVERNMENT					
1963–64	1,105	878	68	..	..	2	84	128	2,265
1964–65	1,810	982	12	38	77	28	75	126	3,148
1965–66	1,049	772	14	..	12	20	38	..	1,905
1966–67	1,376	1,443	20	..	27	18	225	8	3,117
1967–68	1,030	1,402	6	17	106	79	54	..	2,694
				TOTAL					
1963–64	13,315	7,324	1,607	1,634	1,830	165	149	305	26,329
1964–65	18,147	10,400	3,144	2,526	1,795	252	165	494	36,923
1965–66	12,652	9,007	3,852	1,778	1,773	218	173	154	29,607
1966–67	13,920	12,938	3,786	1,355	2,735	227	381	198	35,540
1967–68	18,058	16,296	2,859	1,852	3,200	425	529	36	43,255

The number of *new flats commenced* in each State or Territory during the years 1963–64 to 1967–68 is shown in the following table.

NEW FLATS COMMENCED: NUMBER, STATES AND TERRITORIES, 1963-64 TO 1967-68

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1963–64	10,210	7,089	1,311	1,386	1,743	120	128	290	22,277
1964–65	15,583	10,054	2,428	2,158	1,730	251	148	561	32,913
1965–66	12,468	8,549	3,636	1,547	1,550	211	116	163	28,240
1966–67	13,145	11,987	3,662	1,321	2,455	186	308	194	33,258
1967–68	14,369	14,399	2,997	1,561	3,172	367	305	28	37,198

The following table shows the number of *new flats completed* in each State and Territory during the years 1963–64 to 1967–68, according to *private and government ownership.*

NEW FLATS COMPLETED, BY OWNERSHIP
NUMBER, STATES AND TERRITORIES, 1963-64 TO 1967-68

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
PRIVATE									
1963–64	6,894	3,515	920	907	1,221	156	26	114	13,753
1964–65	12,150	7,884	1,946	1,775	1,826	131	53	191	25,956
1965–66	12,822	8,486	2,952	1,797	1,547	205	51	386	28,246
1966–67	10,853	9,218	4,004	1,482	1,730	153	85	152	27,677
1967–68	12,770	11,635	3,161	1,350	2,382	219	163	167	31,847
GOVERNMENT									
1963–64	882	755	29	82	74	8	. .	36	1,866
1964–65	976	790	133	45	15	22	84	146	2,211
1965–66	2,040	1,020	12	59	77	16	74	126	3,424
1966–67	1,235	920	14	. .	12	32	42	. .	2,255
1967–68	1,338	1,051	20	23	10	73	48	4	2,567
TOTAL									
1963–64	7,776	4,270	949	989	1,295	164	26	150	15,619
1964–65	13,126	8,674	2,079	1,820	1,841	153	137	337	28,167
1965–66	14,862	9,506	2,964	1,856	1,624	221	125	512	31,670
1966–67	12,088	10,138	4,018	1,482	1,742	185	127	152	29,932
1967–68	14,108	12,686	3,181	1,373	2,392	292	211	171	34,414

The number of *new flats under construction* at the end of each year 1963–64 to 1967–68 in each State and Territory is shown in the table below.

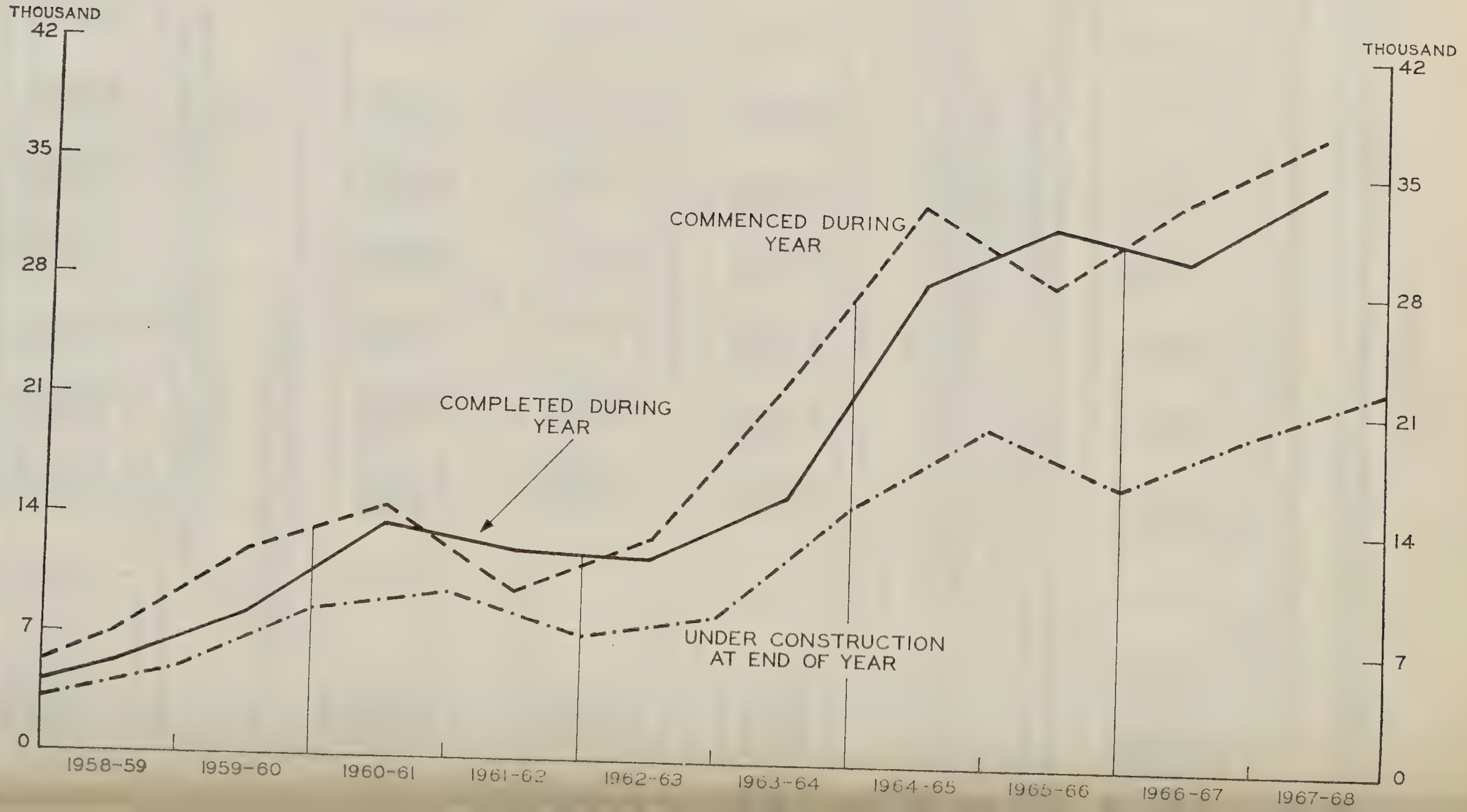
NEW FLATS UNDER CONSTRUCTION
NUMBER, STATES AND TERRITORIES, 1963-64 TO 1967-68

At end of year—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1963–64	7,249	4,951	692	725	1,061	90	121	264	15,153
1964–65	9,706	6,331	1,041	1,063	950	188	132	488	19,899
1965–66	7,312	5,374	1,713	754	876	178	123	139	16,469
1966–67	8,369	7,223	1,357	593	1,589	179	304	181	19,795
1967–68	8,630	8,914	1,173	798	2,369	254	398	38	22,574

PLATE 25

NEW FLATS: AUSTRALIA

1958-59 TO 1967-68



Value of new buildings approved, commenced, completed and under construction

The following table summarises, for the years 1963–64 to 1967–68, the values of all new buildings approved, commenced, completed and under construction, and the value of work done, in each State and Territory. For explanation of the breaks in series in the following table *see* pages 214–5.

NEW BUILDINGS: VALUE, STATES AND TERRITORIES, 1963-64 TO 1967-68
($'000)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
APPROVED									
1963–64 .	469,384	392,928	167,242	157,148	115,720	32,538	10,988	43,376	1,389,324
1964–65 .	531,344	437,514	203,386	166,010	131,958	42,760	17,658	48,220	1,578,850
1965–66 .	490,235	458,608	227,756	133,840	122,572	46,901	14,765	44,903	1,539,580
1966–67 .	597,416	494,050	219,283	116,623	162,937	53,955	17,604	60,594	1,722,462
1967–68 .	689,070	516,339	268,894	148,672	240,792	72,018	28,488	44,168	2,008,441
COMMENCED									
1963–64 .	514,054	394,698	150,356	149,776	118,556	34,664	10,164	42,400	1,414,668
1964–65 .	594,378	419,864	201,704	168,988	122,056	42,040	13,140	54,224	1,616,394
1965–66 .	558,427	450,737	225,553	145,997	130,982	43,789	15,405	49,935	1,620,825
1966–67 .	604,641	509,892	231,776	130,268	169,457	62,077	17,807	54,762	1,780,680
1967–68 .	689,372	504,864	280,536	129,004	242,305	63,152	25,696	54,869	1,989,798
COMPLETED									
1963–64 .	471,680	334,830	133,018	118,302	92,868	33,976	7,962	40,164	1,232,800
1964–65 .	531,544	402,280	178,470	154,500	107,100	37,744	11,784	42,986	1,466,408
1965–66 .	583,236	415,375	209,306	160,301	130,178	39,680	12,065	57,566	1,607,707
1966–67 .	625,956	471,943	219,098	135,221	162,135	48,218	13,243	57,582	1,733,396
1967–68 .	638,958	497,370	256,974	138,531	195,403	61,885	20,295	56,268	1,865,684
UNDER CONSTRUCTION AT END OF YEAR									
1963–64 .	413,202	306,278	87,888	111,514	71,848	29,094	9,770	52,048	1,081,642
1964–65 .	485,184	327,310	113,222	130,890	88,436	33,366	11,254	66,686	1,256,348
1965–66 .	473,627	369,747	133,544	120,662	90,982	37,412	14,816	59,615	1,300,405
1966–67 .	460,701	422,577	150,432	118,940	100,119	51,269	19,811	59,141	1,382,990
1967–68 .	521,357	443,905	176,917	112,356	148,846	52,506	25,205	60,476	1,8541,56
VALUE OF WORK DONE DURING YEAR									
1963–64 .	490,116	362,740	148,578	135,936	97,692	35,850	9,432	43,510	1,323,854
1964–65 .	569,752	413,496	186,234	160,364	122,976	38,356	11,778	53,860	1,556,816
1965–66 .	614,477	442,402	221,780	156,762	133,483	43,201	13,749	55,308	1,681,162
1966–67 .	597,044	487,403	231,768	143,587	163,726	53,098	16,635	52,163	1,745,424
1967–68 .	639,226	525,749	255,345	137,506	212,437	60,058	22,510	61,515	1,914,346

The following tables show the value of *all new buildings completed* in each State and Territory during 1967–68 and in Australia during the years 1963–64 to 1967–68, according to the *type of building*.

NEW BUILDINGS COMPLETED, BY TYPE OF BUILDING: VALUE STATES AND TERRITORIES, 1967-68

($'000)

Type of building	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Houses—									
Brick, brick veneer, concrete and stone	170,743	185,249	52,867	59,885	79,812	17,324	3,968	28,311	598,159
Wood (weather-board, etc.) .	24,037	11,563	44,187	64	115	9,646	..	74	89,686
Fibro-cement .	57,971	8,954	17,195	3,668	17,147	1,313	3,166	..	109,414
Other . . .	1,132	2,331	1,727	298	295	22	798	..	6,603
Total, houses .	253,883	208,097	115,977	63,915	97,370	28,305	7,932	28,385	803,864
Flats . . .	94,768	80,541	19,762	6,827	12,577	1,773	1,591	1,055	218,894
Total, houses and flats .	*348,651*	*288,638*	*135,739*	*70,742*	*109,947*	*30,078*	*9,523*	*29,440*	*1,022,758*
Hotels, hostels, etc. .	15,292	7,965	10,785	2,379	8,759	934	1,010	774	47,898
Shops . . .	11,688	16,701	13,364	10,193	5,079	1,903	484	827	60,239
Factories . .	48,621	55,096	20,498	11,784	15,061	9,686	989	451	162,186
Offices . . .	68,030	48,716	14,294	11,872	14,608	1,409	1,120	9,792	169,841
Other business premises . .	25,355	13,493	15,391	7,365	6,809	2,339	2,045	619	73,416
Education . .	50,801	37,140	15,368	13,655	12,051	4,572	1,021	10,390	144,998
Religious . .	4,511	3,518	1,618	825	683	178	154	1,658	13,145
Health . . .	16,905	10,751	5,967	5,224	3,436	3,836	2,829	755	49,703
Entertainment and recreation . .	18,999	4,778	3,555	1,868	3,670	616	228	228	33,942
Miscellaneous . .	30,105	10,574	20,399	2,624	15,299	6,334	892	1,334	87,561
Total, other buildings .	*290,307*	*208,732*	*121,236*	*67,789*	*85,456*	*31,807*	*10,772*	*26,828*	*842,927*
Total, new buildings .	638,958	497,370	256,974	138,531	195,403	61,885	20,295	56,268	1,865,684

NEW BUILDINGS COMPLETED, BY TYPE OF BUILDING: VALUE AUSTRALIA, 1963-64 TO 1967-68

($'000)

Type of building	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Houses—					
Brick, brick veneer, concrete and stone .	398,664	461,528	490,492	537,653	598,159
Wood (weatherboard, etc.)	111,202	100,948	89,318	85,471	89,686
Fibro-cement	90,330	99,474	99,078	103,542	109,414
Other	2,062	3,772	5,005	8,230	6,603
Total, houses	602,258	665,722	683,893	734,896	803,864
Flats	83,560	157,270	185,997	179,891	218,894
Total, houses and flats	*685,818*	*822,992*	*869,890*	*914,787*	*1,022,758*
Hotels, hostels, etc.	27,818	29,074	31,279	51,145	47,898
Shops	51,490	46,366	68,396	76,462	60,239
Factories	128,426	152,638	167,867	164,588	162,186
Offices	90,076	116,826	103,867	144,245	169,841
Other business premises	54,004	68,110	66,832	76,136	73,416
Education	80,572	95,336	141,566	128,492	144,998
Religious	13,998	16,572	15,001	14,124	13,145
Health	38,602	43,740	54,460	51,106	49,703
Entertainment and recreation . . .	26,606	31,282	28,797	42,309	33,942
Miscellaneous	35,390	43,472	59,752	70,002	87,561
Total, other buildings	*546,982*	*643,416*	*737,817*	*818,609*	*842,927*
Total, new buildings	1,232,800	1,466,408	1,607,707	1,733,396	1,865,684

The following table shows the value of *all new buildings completed* in Australia during the years 1965–66 to 1967–68, classified by *type of building and private and government ownership.*

NEW BUILDINGS COMPLETED, BY TYPE OF BUILDING AND OWNERSHIP: VALUE AUSTRALIA, 1965-66 TO 1967-68

($'000)

Type of building	*Private*			*Government*		
	1965–66	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
Houses—						
Brick, brick veneer, concrete and stone	434,475	484,364	553,158	56,017	53,289	45,002
Wood (weatherboard, etc.)	78,394	75,032	75,857	10,924	10,439	13,829
Fibro-cement	69,938	71,220	77,138	29,140	32,322	32,276
Other	3,405	5,493	4,588	1,600	2,737	2,014
Total, houses	586,212	636,109	710,741	97,681	98,787	93,122
Flats	165,462	165,670	198,989	20,535	14,221	19,905
Total, houses and flats	*751,674*	*801,779*	*909,731*	*118,216*	*113,008*	*113,027*
Hotels, hostels, etc.	30,135	36,447	45,472	1,144	14,698	2,426
Shops	66,152	75,334	59,624	2,244	1,128	615
Factories	155,052	147,060	151,072	12,815	17,528	11,114
Offices	60,720	82,820	105,357	43,147	61,425	64,485
Other business premises	46,824	46,163	47,316	20,008	29,973	26,100
Education	27,578	31,685	24,902	113,988	96,807	120,097
Religious	15,001	14,124	13,145	..	..	..
Health	8,590	10,471	7,624	45,870	40,635	42,079
Entertainment and recreation	22,329	23,698	27,703	6,468	18,611	6,239
Miscellaneous	16,893	24,546	26,637	42,859	45,456	60,924
Total, other buildings	*449,274*	*492,348*	*508,848*	*288,543*	*326,261*	*334,079*
Total, new buildings	**1,200,948**	**1,294,127**	**1,418,579**	**406,759**	**439,269**	**447,105**

Value of building approved

The following table shows the values of approvals for houses and flats, other new buildings, and alterations and additions in Australia for the years 1963–64 to 1967–68. Before 1 July 1966 additions of $10,000 and over were included with new buildings in all States except New South Wales, where they were included in 'alterations and additions'. *From 1 July 1966 alterations and or additions of $10,000 and over are included with new buildings in all States.*

BUILDING APPROVED: VALUE, AUSTRALIA, 1963-64 TO 1967-68

($'000)

Type of building	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Houses and flats	794,514	886,324	836,861	953,587	1,100,456
Other new buildings	594,810	692,526	702,719	768,875	907,985
Total, new buildings	*1,389,324*	*1,578,850*	*1,539,580*	*1,722,462*	*2,008,441*
Alterations and additions	184,142	212,580	195,182	134,805	143,436
Total, building	**1,573,466**	**1,791,430**	**1,734,762**	**1,857,267**	**2,151,877**
Private	1,161,564	1,380,326	1,314,673	1,397,455	1,613,357
Government	411,902	411,104	420,089	459,812	538,520

Persons working on jobs carried out by builders of new buildings

The following table shows the number of contractors, sub-contractors and wage earners working on jobs *carried out by builders of new buildings* in each State and Territory at 28 June 1968. It also shows the numbers of these persons classified according to their main building occupations and the type of building on which they were working.

PERSONS WORKING ON JOBS CARRIED OUT BY BUILDERS OF NEW BUILDINGS STATES AND TERRITORIES, 28 JUNE 1968

INCLUDING CONTRACTOR AND SUB-CONTRACTOR PRINCIPALS ACTUALLY WORKING ON JOBS BUT EXCLUDING PERSONS WORKING ON OWNER-BUILT HOUSES

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Contractors	5,005	3,475	2,203	619	697	457	92	265	12,813
Sub-contractors	9,673	10,811	3,845	2,705	2,882	839	339	1,024	32,118
Wage earners	35,737	31,172	17,661	8,046	13,233	4,833	1,135	3,343	115,160
Carpenters	16,504	15,425	10,337	3,190	4,569	2,496	433	1,159	54,113
Bricklayers	6,153	6,329	1,916	1,898	2,469	505	141	597	20,008
Painters	4,012	3,976	1,895	938	1,494	518	114	480	13,427
Electricians	3,006	2,841	1,213	640	1,126	369	111	313	9,619
Plumbers	4,766	4,157	1,905	1,011	1,577	391	140	388	14,335
Builders' labourers	7,453	5,027	3,393	1,576	2,602	998	352	642	22,043
Other	8,521	7,703	3,050	2,117	2,975	852	275	1,053	26,546
New houses and flats	23,822	23,502	10,489	5,318	8,792	2,498	759	1,978	77,158
Other new buildings(*a*)	22,725	20,602	11,418	5,732	6,835	3,200	793	2,368	73,673
Repairs and maintenance(*b*)	3,868	1,354	1,802	320	1,185	431	14	286	9,260
Total	**50,415**	**45,458**	**23,709**	**11,370**	**16,812**	**6,129**	**1,566**	**4,632**	**160,091**

(*a*) Includes persons working on alterations and additions carried out by builders of new buildings. (*b*) Carried out by builders of new buildings.

The number of persons in each State and Territory working on jobs *carried out by builders of new buildings* at the end of June of each year 1964 to 1968 is shown in the following table.

PERSONS WORKING ON JOBS CARRIED OUT BY BUILDERS OF NEW BUILDINGS STATES AND TERRITORIES, JUNE 1964 TO 1968

INCLUDING CONTRACTOR AND SUB-CONTRACTOR PRINCIPALS ACTUALLY WORKING ON JOBS BUT EXCLUDING PERSONS WORKING ON OWNER-BUILT HOUSES

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
30 June 1964	48,848	39,697	20,544	14,532	11,553	5,198	902	4,486	145,760
30 „ 1965	54,152	42,995	21,666	15,267	12,636	5,392	992	4,735	157,835
30 „ 1966	50,368	42,305	23,305	13,506	12,348	5,350	863	4,525	152,570
30 „ 1967	46,608	42,931	22,454	12,467	14,505	6,354	1,054	4,474	150,847
28 „ 1968	50,415	45,458	23,709	11,370	16,812	6,129	1,566	4,632	160,091

Government activities in the housing field

Housing Agreements between Commonwealth and State Governments

Under the Commonwealth-State Housing Agreements the Commonwealth Government makes substantial long-term loans to the States for the provision of housing.

The 1945 Agreement. In November 1945 the Commonwealth Government entered into an Agreement with the Governments of the States whereby the Commonwealth Government would provide finance for, and the State Governments would undertake the building of, housing projects. Between 1945–46 and 1955–56, under this Agreement, the Commonwealth Government advanced to the States a total of $481,118,000.

Initially, dwellings constructed under the 1945 Agreement were only sold to tenants if the tenant was able to arrange payment of the full purchase price to the State immediately on sale. Subsequent amendments to the Agreement progressively eased conditions of sale. For information on the conditions of sale, etc., under the 1945 Agreement *see* Year Book No. 48, page 367.

The 1956 Agreement. In 1956 the Commonwealth and the States entered into a new Agreement under which added emphasis was placed on the construction of dwellings for private ownership. The Agreement provided that parts of the loans advanced to each State were to be advanced to building societies and other approved institutions for lending to private home builders and purchasers. The balance of the amounts advanced to each State was used by the States for the erection of dwellings for either rental or sale. The Commonwealth was entitled to specify that up to five per cent of the moneys allocated for the erection of dwellings by the State be set aside for the erection of dwellings for serving members of the defence forces. For features of the 1956 Commonwealth and State Housing Agreement *see* Year Book No. 48, pages 367–8.

The 1961 Agreement. The period during which Commonwealth advances to the States could be made under the 1956 Agreement terminated on 30 June 1961. A new Agreement was entered into which extended for a further five years the period during which advances could be made and also amended the 1956 Agreement in certain respects concerning funds for the erection of dwellings for rental to servicemen and the rate of interest payable on Commonwealth advances.

The 1966 Agreement. A new Agreement was entered into which extended for a further five years the period during which advances could be made, and also amended the 1956–1961 Agreement in certain respects concerning the definition of 'member of the forces', the erection by the States of blocks of flats in metropolitan areas, the erection of dwellings for rental to servicemen, and the provision of finance to home builders in rural areas.

For further information regarding the above Agreements *see* Year Book No. 53, pages 276–7.

Operations under the various Housing Agreements

The following tables show the operations under the various Housing Agreements during 1967–68 and to 30 June 1968. The earliest single year for which details are given in the tables is 1963–64; for earlier years *see* Year Book No. 53, pages 278–9.

COMMONWEALTH AND STATE HOUSING AGREEMENTS: SUMMARY, 1967-68

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
ADVANCES TO STATES ($'000)							
Advances to States(*a*)	44,610	33,765	12,627	21,000	11,241	6,700	129,943
State Housing Programme(*b*)	30,156	23,100	6,342	10,150	7,000	4,690	81,438
Home Builders' Account—							
Advances(*c*)	12,924	9,900	2,718	10,850	3,000	2,010	41,402
Amounts drawn by institutions	17,944	16,307	3,979	12,288	3,476	2,460	56,454
Service Housing Funds allocated by—							
Commonwealth	1,530	765	3,567	..	1,241	..	7,103
States	1,500	765	317	..	350	..	2,932
NUMBER OF DWELLINGS							
State Housing Programme—							
Commenced	3,346	2,145	939	1,076	1,064	622	9,192
Completed	4,300	2,214	775	1,582	824	676	10,371
Under construction at 30 June 1968	2,484	1,721	299	931	605	311	6,351
Home Builders' Account—							
Purchased—New	806	641	187	731	142	84	2,591
Other	109	..	..	..	..	64	173
New construction—							
Approved	1,357	1,280	360	1,348	383	180	4,908
Commenced	1,263	1,786	352	1,284	311	218	5,214
Completed	1,333	1,884	350	1,301	324	225	5,417
Service Housing—							
Agreed programme	298	128	474	..	163	..	1,063
Completed(*d*)	436	199	160	..	73	..	868
Sold under—							
1945 Agreement	407	467	110	6	221	(*e*)	(*e*)1,211
1956 to 1966 Agreements	1,465	1,326	28	807	260	520	4,406

(*a*) Includes supplementary advances for Service Housing. (*b*) The maximum amount is 70 per cent of the Commonwealth advances, other than supplementary advances for Service Housing. (*c*) The minimum amount must be 30 per cent of the Commonwealth advances other than supplementary advances for Service Housing. (*d*) Also included in State Housing Programme above. (*e*) Tasmania did not operate under the 1945 Agreement after August 1950.

COMMONWEALTH AND STATE HOUSING AGREEMENTS: ADVANCES TO STATES(a) 1963-64 TO 1967-68 AND TO 30 JUNE 1968

($'000)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.(b)*	*Total*
1963–64 . . .	34,163	27,628	10,021	19,400	7,052	6,000	104,264
1964–65 . . .	38,132	34,360	8,231	20,500	7,492	6,400	115,115
1965–66 . . .	44,375	33,566	8,950	21,057	8,846	7,448	124,242
1966–67 . . .	43,325	32,960	13,740	20,750	9,478	7,500	127,753
1967–68 . . .	44,610	33,766	12,627	21,000	11,240	6,700	129,943
Total from 1 July 1945	**574,029**	**494,001**	**153,159**	**211,179**	**143,326**	**71,251**	**1,646,945**

(a) Includes supplementary advances (Service Housing) under the 1956 to 1966 Agreements. (b) Tasmania withdrew from the 1945 Agreement in August 1950 and repaid all advances made to it.

COMMONWEALTH AND STATE HOUSING AGREEMENTS: NUMBER OF DWELLINGS PROVIDED(a), STATES, 1963-64 TO 1967-68 AND TO 30 JUNE 1968

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.(b)*	*Total*
1963–64 . . .	5,553	3,922	1,435	3,429	1,460	824	16,623
1964–65 . . .	6,342	4,431	1,121	3,637	1,022	895	17,448
1965–66 . . .	6,385	4,248	1,351	3,569	1,435	942	17,930
1966–67 . . .	5,866	5,156	1,151	4,029	1,128	1,025	18,355
1967–68 . . .	6,548	4,739	1,312	3,614	1,290	1,049	18,552
Total from 1 July 1945(c)	**101,810**	**78,888**	**24,927**	**40,597**	**26,890**	**10,431**	**283,543**

(a) The total number of houses and flats completed under State Housing Programmes plus, since 30 June 1956, the numbers completed and purchased under the Home Builders' Account. (b) Tasmania withdrew from the 1945 Agreement in August 1950 and repaid all advances made to it. (c) Includes some dwellings erected before 1945–46 to which the 1945 Agreement applied and also 1,130 dwellings completed in Tasmania up to the time of that State's withdrawal from the 1945 Agreement in August 1950.

COMMONWEALTH AND STATE HOUSING AGREEMENTS: NUMBER OF HOUSES SOLD 1963-64 TO 1967-68 AND TO 30 JUNE 1968

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
1963–64 . . .	1,485	1,799	382	457	220	437	4,780
1964–65 . . .	2,350	2,028	230	812	180	531	6,131
1965–66 . . .	1,919	2,221	189	886	203	464	5,882
1966–67 . . .	1,502	1,859	131	1,002	567	385	5,446
1967–68 . . .	1,872	1,793	138	813	481	520	5,617
Total from 1 July 1948	**30,611**	**25,936**	**5,226**	**5,352**	**6,724**	**4,494**	**78,343**

War service homes

The *War Service Homes Act* 1918–1968 makes provision for assistance to be granted to persons who satisfy the eligibility conditions set out in the Act, to enable them to acquire on concessional terms a soundly constructed home that they would occupy as a residence.

Persons eligible for assistance under the Act include members of the Australian forces and nursing services enlisted or appointed for or employed on active service outside Australia or on a ship of war during the 1914–1918 and 1939–1945 Wars and persons who served in the warlike operations in Korea or Malaya or who have served on 'special service' as defined in the *Repatriation (Special Overseas Service) Act* 1962–1968. 'Special service' includes 'special duty' in an area which by reason of warlike operations or a state of disturbance has been declared a 'special area' under the Repatriation (Special Overseas Service) Act. The areas declared as a 'special area' under the Act are:

Vietnam (Southern Zone) from 31 July 1962;
certain areas of Borneo, Sabah and Sarawak from 8 December 1962 to 30 September 1967;
certain areas of Malaya from 28 May 1963;
Malaysia (the remainder) and Singapore from 7 July 1965 to 30 September 1967;
Vietnamese waters from 1 March 1967.

The categories of eligible persons also include the widow and, in some circumstances, the widowed mother of an eligible person and persons domiciled in Australia and employed in certain sea-going service during the 1914–1918 and 1939–1945 Wars.

The Director of War Service Homes is responsible for the execution of the War Service Homes Act subject to the directions of the Minister for Housing.

Operations under the War Service Homes Act

The following tables give details of the operations under the War Service Homes Act in the year 1967–68 and from the inception of the scheme on 6 March 1919 to 30 June 1968. The earliest single year for which details are given in the tables is 1963–64; for earlier years *see* previous issues of the Year Book. The figures shown include operations in the Territories of Papua, New Guinea and Norfolk Island.

WAR SERVICE HOMES ACT: OPERATIONS, AUSTRALIA, 1967-68 AND TO 30 JUNE 1968

		1967–68			*From inception to 30 June 1968*		
		Eligibility established from service in—			*Eligibility established from service in—*		
		1914–18 War	*1939–45 War, Korea, etc. (a)*	*Total*	*1914–18 War*	*1939–45 War, Korea, etc. (a)*	*Total*
Applications received	No.	426	9,238	9,664	117,718	399,770	517,488
Applications approved	,,	261	6,527	6,788	57,608	238,701	296,309
Homes purchased	,,	179	4,304	4,483	19,760	123,357	143,117
Homes built, or assistance given to build them	,,	37	770	807	24,105	68,313	92,418
Mortgages discharged	,,	33	1,129	1,162	4,225	31,530	35,755
Total homes provided	,,	*249*	*6,203*	*6,452*	*48,090*	*223,200*	*271,290*
Transfers and resales	,,	37	463	500	9,537	14,061	23,598
Total capital expenditure	$'000	n.a.	n.a.	46,019	n.a.	n.a.	1,260,559
Total receipts	,,	n.a.	n.a.	69,165	n.a.	n.a.	765,504

(*a*) Korea, Singapore, Malaysia or Vietnam (Southern Zone) and Vietnamese waters.

WAR SERVICE HOMES ACT: OPERATIONS, AUSTRALIA 1963-64 TO 1967-68

	Number of—						
		Homes provided					
Year	*Applications received*	*Homes purchased (a)*	*Homes built (b)*	*Mortgages discharged*	*Total*	*Total capital expenditure*	*Total receipts*
						$'000	$'000
1963–64	13,812	6,206	1,784	1,636	9,626	70,016	55,166
1964–65	12,381	6,727	1,398	1,551	9,676	70,104	60,866
1965–66	10,841	7,252	1,143	1,452	9,847	70,010	62,166
1966–67	10,160	6,007	1,070	1,304	8,381	59,123	67,050
1967–68	9,664	4,483	807	1,162	6,452	46,019	69,165

(*a*) Homes purchased with assistance under the War Service Homes Act. (*b*) Or assistance given to build a home.

WAR SERVICE HOMES ACT: NUMBER OF HOMES PROVIDED
STATES AND TERRITORIES, 1963-64 TO 1967-68

Year	*N.S.W.(a)*	*Vic.*	*Qld(b)*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1963–64 .	3,747	2,787	1,140	695	939	222	3	93	9,626
1964–65 .	3,901	2,670	1,184	752	885	216	. .	68	9,676
1965–66 .	3,812	2,799	1,350	856	727	229	4	70	9,847
1966–67 .	3,654	2,164	1,145	575	615	171	5	52	8,381
1967–68 .	2,761	1,564	974	419	487	171	1	75	6,452

(*a*) Includes Norfolk Island. (*b*) Includes Territories of Papua and New Guinea.

In addition to the homes provided under the War Service Homes Act and shown above, 2,495 homes, which had been provided originally under the Housing Agreements with the States, have been taken over in accordance with those Agreements.

Home Savings Grant Scheme

The administration of the Home Savings Grant Scheme is a function of the Commonwealth Department of Housing. The purpose of the Scheme is to assist young married persons, and young widowed persons with dependent children, to purchase or build their own homes. A further objective is to increase the proportion of total private savings available for housing purposes by encouraging young people to save with those institutions which provide the bulk of long-term housing finance. The Scheme is governed by the *Homes Savings Grant Act* 1964–1967. The Act authorises the payment of grants from the National Welfare Fund.

The Scheme provides for the payment of grants of $1 for every $3 saved by eligible persons under 36 years of age for the first home they own after marriage. The savings must be made over a period of at least three years and held in an approved form. The maximum grant to a married couple, or to husband or wife if only one is eligible, or to a widowed person, is $500 on savings of $1,500 or more. Smaller grants down to a minimum of $10 are payable on lesser amounts saved. To be eligible for the grant, a person must be married, or widowed with one or more dependent children, and must have—or must be married to a person who has—entered into a contract to buy a home or have one built, or begun to build a home as an owner-builder. The person must be under 36 years of age at the time of marriage and at the date of the contract to buy or build or the date building began, must have either been an Australian citizen or lived in Australia during the three years immediately preceding that date, and must also have saved in Australia in an approved form throughout that period. Those three years are known as the applicant's 'savings years'. The grant is payable in respect of existing homes and homes being built. Flats and home-units may also be eligible provided separate title can be obtained. The home, including the land, the house itself and any other improvements, must not cost more than $15,000, or $14,000 if the contract to buy or build the home was made, or the building of the home as an owner-builder began, before 28 November 1966. Most homes are eligible, the main exception being homes purchased from State housing authorities which have been built with money advanced by the Commonwealth under the Commonwealth-State Housing Agreement at concessional rates of interest.

The main forms of savings acceptable under the Scheme are Home Savings Accounts with savings banks, fixed deposits with trading banks designated Home Savings Accounts, and deposits with or shares in registered building or co-operative housing societies. Savings spent in connection with the purchase or construction of the home prior to the date of the contract to buy or build the home, or the date building began, are also acceptable. In addition, savings in certain other forms up to 31 December 1964 were acceptable up to 31 December 1967. These forms were accounts with savings and trading banks other than Home Savings Accounts, and deposits with registered friendly societies and credit unions. However, all new and additional savings after 1 January 1965 must be in one or more of the forms mentioned earlier to be acceptable. The amount of savings that qualify for a grant is the sum of the amounts saved, in acceptable forms, in each savings year. However, the limit on the amount of savings in any savings year that can qualify for a grant is $1,120 for savings years commencing before 1 January 1965, $500 for savings years commencing on or after 1 January 1965, and $600 for savings years commencing on or after 1 May 1966.

Full details of the Scheme are set out in the official pamphlet *A Grant for Your Home* available from banks, building and housing societies, post offices, and offices of the Commonwealth Department of Housing throughout Australia. Additional statistical information is contained in the Annual Reports by the Secretary, Department of Housing, on the *Homes Savings Grant Act* 1964–1967, which are available from the Government Printer, Canberra.

Operations under the Home Savings Grant Scheme

Particulars of applications received and approved during 1967–68 and during the period from 20 July 1964, when the scheme commenced to operate, to 30 June 1968 are set out below.

HOME SAVINGS GRANT SCHEME: OPERATIONS, STATES AND TERRITORIES, 1967-68

		N.S.W.	*Vic.*	*Qld*	*S.A.(a)*	*W.A.*	*Tas.*	*A.C.T. (b)*	*Aust.*
Applications received	No.	11,811	11,329	4,819	3,208	2,060	838	347	34,412
Applications approved(*c*)	,,	11,216	10,717	4,548	3,086	1,849	784	318	32,518
Grants approved	$'000	4,681	4,527	1,817	1,241	749	304	128	13,446
Average grant approved	$	417	422	399	402	405	388	402	414
Expenditure from National Welfare Fund	$'000	4,597	4,470	1,820	1,243	740	305	124	13,299

(*a*) Includes Northern Territory. (*b*) Includes Municipality of Queanbeyan, N.S.W. (*c*) Includes applications received on or before 30 June 1967 and approved after that date.

HOME SAVINGS GRANT SCHEME: OPERATIONS, 1964-65 TO 1967-68 AND TO 30 JUNE 1968

Year	*Applications received*	*Applications approved*	*Grants approved*	*Average grant approved*	*Expenditure from National Welfare Fund*
			$'000	$	$'000
1964–65	35,283	25,079	11,510	458	11,349
1965–66	29,021	29,647	13,348	450	13,346
1966–67	30,829	27,768	11,987	432	11,885
1967–68	34,412	32,518	13,446	414	13,299
Total from 20 July 1964	**129,545**	**115,012**	**50,292**	**437**	**49,879**

Homes qualifying for grants

The two following tables contain particulars of homes in respect of which grants were approved during 1967–68. As grants are payable only to persons under 36 years of age and in respect of homes costing no more than $15,000 (or $14,000 if acquired before 28 November 1966), these statistics should not be regarded as being applicable to home owners in general.

HOME SAVINGS GRANT APPLICATIONS APPROVED: MANNER OF ACQUISITION, TOTAL VALUE, AND AVERAGE VALUE OF HOMES (INCLUDING LAND) STATES AND TERRITORIES, 1967-68

	Purchase of house(a)			*Purchase of flat or home unit*			*Home built under contract*		
State or Territory	*Number of approvals*	*Total value(b)*	*Average value(b)*	*Number of approvals*	*Total value(b)*	*Average value(b)*	*Number of approvals*	*Total value(c)*	*Average value(c)*
		$'000	$		$'000	$		$'000	$
New South Wales	6,714	69,750	10,389	232	2,651	11,425	3,813	44,110	11,568
Victoria	5,992	62,550	10,439	60	638	10,639	4,084	47,956	11,742
Queensland	2,487	21,414	8,610	8	72	9,034	1,774	17,788	10,027
South Australia(*d*)	1,761	16,964	9,633	1	7	6,700	1,207	13,234	10,964
Western Australia	999	9,838	9,847	2	22	11,067	767	8,863	11,556
Tasmania	456	4,087	8,963	2	19	9,600	205	2,211	10,785
Australian Capital Territory(*e*)	206	2,749	13,343	..	..	..	89	1,175	13,205
Australia	**18,615**	**187,351**	**10,065**	**305**	**3,409**	**11,178**	**11,939**	**135,337**	**11,336**

For footnotes *see* next page, where table is continued.

HOME SAVINGS GRANT APPLICATIONS APPROVED: MANNER OF ACQUISITION, TOTAL VALUE, AND AVERAGE VALUE OF HOMES (INCLUDING LAND) STATES AND TERRITORIES, 1967–68—*continued*

State or Territory	*Owner-built home*			*All homes*		
	Number of approvals	*Total value(f)*	*Average value(f)*	*Number of approvals*	*Total value*	*Average value*
		$'000	$		$'000	$
New South Wales	457	4,732	10,354	11,216	121,242	10,810
Victoria	581	6,509	11,204	10,717	117,654	10,978
Queensland	279	2,749	9,852	4,548	42,023	9,240
South Australia(*d*) . . .	117	1,282	10,961	3,086	31,486	10,203
Western Australia . . .	81	884	10,912	1,849	19,607	10,604
Tasmania	121	1,223	10,107	784	7,540	9,618
Australian Capital Territory(*e*) .	23	297	12,893	318	4,220	13,272
Australia	**1,659**	**17,676**	**10,654**	**32,518**	**343,773**	**10,572**

(*a*) Includes previously occupied houses. (*b*) Usually based on the purchase price. (*c*) Usually based on the cost of the land and the contract price of the dwelling. (*d*) Includes Northern Territory. (*e*) Includes Municipality of Queanbeyan, N.S.W. (*f*) Usually based on the cost of the land and the assessed value of the dwelling.

HOME SAVINGS GRANT APPLICATIONS APPROVED: METHOD OF FINANCING HOMES, AND AVERAGE MORTGAGE LOANS, STATES AND TERRITORIES, 1967–68

State or Territory	*Method of financing homes*				*Average first mortgage loan (b)*	*Average second mortgage loan*
	With first mortgage loan and without second mortgage loan	*With first and second mortgage loans*	*Others(a)*	*Total*		
	number	number	number	number	$	$
New South Wales . .	9,229	1,634	353	11,216	7,373	1,835
Victoria	8,341	1,544	832	10,717	7,182	1,542
Queensland	3,953	404	191	4,548	6,628	1,551
South Australia(*c*) . .	1,993	915	178	3,086	7,040	1,735
Western Australia . .	1,295	419	135	1,849	7,211	1,731
Tasmania	638	77	69	784	7,065	1,440
Australian Capital Territory(*d*)	78	238	2	318	7,099	3,393
Australia . . .	**25,527**	**5,231**	**1,760**	**32,518**	**7,156**	**1,766**

(*a*) Homes financed without mortgage loan. Includes homes financed from the applicants' own resources only, with personal or unsecured loans, purchased under a terms contract of sale, etc. (*b*) Includes homes financed with and without second mortgage loans. (*c*) Includes Northern Territory. (*d*) Includes Municipality of Queanbeyan, N.S.W.

Housing loans insurance scheme

The Housing Loans Insurance Corporation was established by the *Housing Loans Insurance Act* 1965 to insure approved lenders against losses arising from the making of housing loans. The main purpose of the activities of the Corporation is to assist people to borrow, as a single loan at a reasonable rate of interest, the money they need and can afford to repay to obtain a home suited to their requirements.

To encourage the making of high-ratio loans the Corporation will insure loans of up to 95 per cent of valuation for houses valued at $15,000 or less. Where the valuation of a home exceeds $15,000 the maximum insurable amount is 95 per cent of the first $15,000 of valuation plus 70 per cent of the balance, or $20,000, whichever is the lesser. A once-and-for-all premium of 1½ per cent of the amount of the loan is charged by the Corporation for the insurance of loans representing 80 per cent or more of valuation. The premium rate falls to a minimum of 0.5 per cent on loans of less than 71 per cent of valuation. The premium normally is payable by the borrower, but lenders may agree to add it to the amount of the loan for repayment by the borrower over the duration of the loan. The maximum rate of interest that may be charged on insured loans is 7½ per cent (December 1968) per annum and the maximum period for repayment is forty years. The maximum rate of interest is kept under continuing review and may be varied by the Corporation, with the concurrence of the Minister for Housing, whenever changes appear to be warranted by movements in interest rates generally or by other developments.

The Corporation insures loans that are made for a wide range of purposes in addition to the purchase or construction of a dwelling. The other purposes include alterations, extensions or improvements to a dwelling, and the provision or improvement of roads, kerbing and footpaths. An insured loan may be made only by an approved lender. Approved lenders are appointed by the Corporation from within approved classes of lenders specified by the Minister for Housing. The approved classes include banks, housing and building societies, friendly societies, life and general insurance companies, trustee companies, pension and other retirement funds, mortgage management companies and solicitors. The Corporation commenced its operations in November 1965. At the end of June 1968 the face value of insurances current amounted to $122.7 million.

State housing authorities

The following paragraphs describe briefly the organisation of the various State housing authorities and their activities in the fields of home construction and provision of homes on a rental basis (*see* pages 236–9 for their financial advances to persons wishing to purchase or build a home). For summarised figures of total government construction of houses and flats, *see* pages 216, 218, and 220–1. For a fuller description of the activities of State housing authorities and their financial advances to home purchasers or builders *see* Year Book No. 53, pages 283–91.

New South Wales—The Housing Commission of New South Wales. The Housing Commission of New South Wales was constituted in 1942, its principal function being the provision of low-cost housing for rental or sale to persons in the lower or moderate income groups.

Advances from the Commonwealth have provided most of the Housing Commission's capital funds and by 30 June 1968 had aggregated $465,062,266 of which $50,568,002 had been repaid. Other net funds of the Commission at 30 June 1968 comprised repayable advances from the State, $13,844,845, public loans raised by the Commission, $700,000, grants from the State, $15,794,145 (including $8,722,249 from consolidated revenue and $7,000,000 from taxes on poker machines), provision for maintenance of properties, $4,446,162, and accumulated surplus, $33,791,640. In addition, the Commission owed $7,321,252 to creditors, mainly for purchase of land and work-in-progress. These funds were represented by fixed assets, $486,697,631 (including $157,348,911 debtors for purchase of homes) and current assets, $3,694,677. In 1967–68, the Commission's income was $32,992,004 (including rent $22,778,562 and interest $7,742,112), expenditure $29,923,408 (interest, $14,988,541), and capital expenditure (including construction of houses for sale on rental purchase terms) $42,059,000.

Most of the permanent dwellings provided by the Commission have been erected under the Commonwealth-State Housing Agreements. In 1967–68, 5,223 houses and flats, valued at $30,114,000, were completed for the Housing Commission by private builders on contract to the Commission.

Upon request by other State Departments the Housing Commission will erect houses for employees of those Departments, the Departments providing the necessary lands and funds. In addition, the Commission erects (with State funds) dwellings for employees of industries connected with decentralisation and development. Specially designed units are erected by the Housing Commission to provide dwellings for elderly persons at rentals within their means. The rents of these units are approximately $2 a week for elderly single persons and $3 a week for elderly couples, and 4,096 units had been completed at 30 June 1968.

Applicants for Commission housing may elect either to purchase or to rent the dwelling allocated to them. Terms of sale provide for a minimum deposit of $100 with repayments spread over a maximum period of forty-five years. Further, those tenants who originally elect to rent may subsequently purchase the dwellings occupied by them on similar terms. Applicants may also apply to have a standard type of dwelling erected on their own block of land.

Victoria—Housing Commission, Victoria. The Housing Commission, Victoria was set up in 1938 as a result of the Housing Act of the previous year. The objects of the Commission as now laid down are the improvement of existing housing conditions; the provision of suitable rental housing for persons displaced by slum reclamation or living under unsatisfactory conditions, and for other eligible persons; the sale of houses to eligible persons and the making of advances to such persons to enable them to own their homes; the development of land for housing and related purposes; and the responsibility of maintaining housing standards. Since the signing of the 1945 Commonwealth-State Housing Agreement the construction of dwellings has been financed by the Commonwealth Government and Commission Funds.

At 30 June 1968 the Housing Commission had completed 1,328 dwelling units under the State Housing Scheme, and 60,692 dwelling units under Commonwealth-State Agreements. Specially designed dwelling units are erected by the Commission to provide dwellings for elderly persons at rentals within their means. To 30 June 1968, 3,480 units had been completed.

Queensland—The Queensland Housing Commission. The Queensland Housing Commission was established in 1945 to assist in meeting the housing shortage. In addition, the Commission was empowered to build houses itself, either for sale or for rental.

The Housing Commission finances its operations through two Treasury Trust Funds—the Queensland Housing Commission Fund and the Commonwealth-State Housing Fund. In addition, a Home Builders' Deposit Trust Fund is available to assist eligible persons to accumulate money to acquire land and erect a Commission dwelling thereon, or to purchase a dwelling under contract of sale conditions. Total disbursements by the Commission for the year 1967–68 amounted to $30,845,267, representing $9,035,236 from the Queensland Housing Commission Fund and $21,810,031 from the Commonwealth-State Housing Fund, while the Home Builders' Deposit Fund had a balance of $196 at 30 June 1968.

During 1967–68 the Commission completed 1,716 house units, bringing the total completions under all schemes since the revival of housing construction in 1944–45 to 36,605. Of this number, 21,824 houses, or 59.6 per cent, were for home ownership, and 14,781 or 40.4 per cent, were for rental.

In the field of rental housing the Commission administers and acts as the constructing authority under the Commonwealth-State Housing Agreements. Operating under the provisions of '*The State Housing Acts*, 1945 *to* 1966' the Commission, through its scheme of workers' dwellings, makes advances for the construction of dwellings to eligible persons who own a suitable building site. The number of workers' dwellings completed during 1967–68 amounted to 314, making a total of 30,377 completions since the inception of the scheme. The Commission also has power to make advances, secured by mortgage, to firms for housing of employees. The Commission has power to sell houses under contract of sale conditions. Contract of sale agreements were made to purchase 667 of the Commission's houses during 1967–68.

South Australia—The South Australian Housing Trust. The South Australian Housing Trust operates under the South Australian Housing Trust Act, 1936–1965 and the Housing Improvements Act, 1940–1966 for the purpose of providing houses for families of limited means. Houses are built for both rental and sale, and to 30 June 1968, 61,971 had been completed throughout the State, of which some 31,300 had been built and sold under various schemes. At 30 June 1968 the rents of five-roomed (i.e. three bedrooms) double-unit houses ranged from $4.25 a week for houses of an older type to $9.00 a week for houses then being completed. Single unit rents ranged between $4.75 and $13.00. Two- and three-storey groups of flats with weekly rentals ranging from $8.25 to $15.50 per flat have been built in the Metropolitan Area and at Elizabeth; 1,216 of these flats have been completed in the Metropolitan Area and 220 at Elizabeth. In 1953 the Trust began building cottage or pensioner flats for elderly people. At 30 June 1968 it had built 937 cottage flats from its own resources and an additional 619 for charitable and non-profit organisations. As an agent for the South Australian Government, the Trust also constructs houses in country areas for married couples of limited means. Rents charged in these cases are below economic rents.

During 1962–63 the Trust commenced construction of rental-purchase houses. The aim of this scheme is to provide less expensive houses for the lower income groups. It is expected that such houses will, to some extent, replace double-unit type rental houses. The Trust has also undertaken the construction of houses for various State Government Departments which require to house staff in country districts. In addition, 194 houses in country areas have been built for the State Department of Aboriginal Affairs. The letting of these houses to selected Aboriginal families is administered by the Department. In order to assist primary producers the Trust will erect houses on the applicant's own land for his own use or that of his employees, either using local materials or transporting prefabricated houses to the site.

Western Australia—State Housing Commission of Western Australia. The State Housing Commission was established in January 1947, under the *State Housing Act, 1946*, to replace the Workers' Homes Board. The *State Housing Act, 1946–1966* has as its objects 'the improvement of existing housing conditions' and 'the provision of adequate and suitable housing accommodation for persons of limited means and certain other persons not adequately housed'. It provides for the erection of homes for workers, the making of advances to workers for the purchase of homes, the erection of homes for letting on a weekly rental basis, the acquisition and development of land, the clearing of slums, the erection of hostels, and the planning of community facilities. The Commission builds houses for letting or sale and lends money for home building. The houses are built by private contract on land provided by the applicant or the Commission. The administration of the Commonwealth and State Housing Agreements and the War Service Homes Act is included in the functions of the Commission. At 30 June 1968, 8,787 dwellings had been completed for purchase under mortgage, contract or sale and leasehold conditions of the State Housing Act. In addition, a further 73 advances were granted during 1967–68 under second mortgage conditions, making a total of 1,776 advances under this form of assistance at 30 June 1968.

The Commission also conducts certain other housing schemes and has completed or is currently engaged in other specific projects, details of which are given in previous Year Books. Included among current activities are the building and maintenance of houses for the Government Employees' Housing Authority, which has taken over 154 homes built in country areas under the former Government Employees' Housing Scheme and acquired 410 houses including 400 previously owned by various Government Departments; the construction of up to 100 houses to be built under the provisions of the *Laporte Industrial Factory Agreement Act, 1961–1965*; the building of up to 30 homes a year until 1969–70 as part of the Broken Hill Proprietary Company's Agreement with the State to establish an integrated steel industry; and the erection of 128 houses at Exmouth as part of the support town and for personnel employed on the United States Navy V.L.F. radio station. A third block of flats for the accommodation of elderly ladies was completed in May 1966 and at 30 June 1968 a fourth block of 34 flats in the Fremantle area was nearing completion. Further projects of this nature are planned in the East Victoria Park, North Beach and Manning areas in 1969–70. The Commission also built during 1966–67 a block of flats for single working women to encourage the various organisations to undertake similar projects themselves.

The Commission administers building society legislation and the *Housing Loan Guarantee Act, 1957–1965*, under which the Government guarantees lenders of funds to building societies and other approved financial organisations making advances to families interested in owning their own home on low deposits, and at an interest rate not exceeding 6¾ per cent per annum reducible.

Tasmania—The Housing Department. The Housing Department was established in July 1953 and is responsible for administering that portion of the *Homes Act* 1935 which relates to the acquisition and development of land for housing purposes and the erection of homes for rental and ultimate sale, and the *Casual Workers' and Unemployed Persons' Homes Act* 1936.

During 1967–68, 665 dwellings were completed. Construction since 1944 has comprised 10,826 dwelling units, of which 10,282 were single units (8,614 of timber), 226 were elderly persons' flatettes, 22 were maisonettes, and 296 were multi-unit flats.

Flats, maisonettes and elderly persons' homes are for rental only. Single unit dwellings are normally allotted on a purchase contract basis, but in some special cases may be occupied on a rental basis. The rental of a newly erected three-bedroom timber house in the Hobart metropolitan area approximated $14.15 in the June quarter of 1968. In certain necessitous cases rental rebates are allowed. Under the current rental rebate formula a married couple whose only income is the age pension pay $3.80, while a single person solely dependent on the pension pays $2 a week.

Allotments are usually made on a no-deposit purchase contract basis, repayments being over a maximum term of fifty-three years. Purchase contracts are sometimes surrendered to the Department. Net of surrenders, 7,220 purchase contracts had been entered into by June 1968. The sale price, excluding land, of a new three-bedroom house in the Hobart metropolitan area was approximately $7,840 in the June quarter of 1968.

Housing schemes in Commonwealth Territories

Northern Territory. In 1946 control of all government-owned residences in the Territory (excluding those belonging to the Defence Services or Commonwealth Railways, or attached to post offices) was vested in the Administration. The Northern Territory Housing Commission provides rental housing for persons of limited means who are not adequately housed and who are not officers of either the Commonwealth or the Northern Territory Public Service. The Commission was established in 1959 and operates under authority of the *Housing Ordinance* 1959–1968; to 30 June 1968 a total of 1,361 houses and flats had been completed; 878 of these are in Darwin (including 159 flats), 310 in Alice Springs (including 24 flats), 76 in Katherine, and 87 in Tennant Creek (including 9 flats). A further 446 houses and 233 flats were under construction.

Australian Capital Territory. The Commonwealth Government provides houses and flats for rental to persons employed in the Australian Capital Territory. At 30 June 1968 the Department of the Interior controlled 7,778 houses and 2,022 flats for rental purposes. Government rental houses may be purchased by tenants. From 1 July 1950 to 30 June 1968, 6,482 houses had been sold to tenants.

Papua and New Guinea. In 1960 the Administration, through the Commissioner for Housing, commenced a scheme for providing low-cost houses for rental and eventual sale, where possible, to indigenes, mixed race peoples and Asians. To 30 June 1968, 322 houses had been completed.

A Housing Commission has been established to improve existing housing conditions, to provide adequate and suitable housing for letting and sale to persons who are of limited means or unsatisfactorily housed, to make advances for home purchase, and to develop land for housing. The Housing Commission Ordinance 1967 received the Governor-General's assent on 1 June 1967.

Summary of rental activities of government authorities

The first of the two following tables shows the revenue from rental for dwellings under control of government housing authorities each year from 1963–64 to 1967–68, and the second the number of tenants paying rent for dwellings under control of government housing authorities at the end of each year 1963–64 to 1967–68.

GOVERNMENT HOUSING AUTHORITIES: REVENUE FROM RENTALS, STATES AND TERRITORIES, 1963-64 TO 1967-68
($'000)

Year	*N.S.W.*	*Vic.*	*Qld(a)*	*S.A.(b)*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1963–64 .	16,112	12,024	4,372	8,788	4,792	1,234	800	3,638	51,760
1964–65 .	17,414	13,322	4,732	9,184	5,177	1,266	905	3,493	55,493
1965–66 .	18,864	13,918	5,459	9,440	5,532	1,344	1,218	3,708	59,483
1966–67 .	20,823	15,406	6,181	10,915	6,678	1,522	1,498	3,853	66,876
1967–68 .	22,779	16,266	6,702	11,603	7,161	1,761	1,717	3,861	71,850

(*a*) Excludes rentals in respect of tenanted temporary dwellings. (*b*) Excludes rentals in respect of temporary and emergency dwellings.

GOVERNMENT HOUSING AUTHORITIES: NUMBER OF TENANTS PAYING RENT STATES AND TERRITORIES, 1963-64 TO 1967-68

Year	*N.S.W.*	*Vic.*	*Qld(a)*	*S.A.(b)*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.(c)*	*Aust.*
1963–64 .	44,697	32,870	12,084	26,024	14,875	3,230	1,752	9,143	144,675
1964–65 .	47,102	33,541	12,605	27,113	15,394	3,238	2,166	9,054	150,213
1965–66 .	50,346	33,995	13,439	27,632	16,639	3,283	2,398	9,073	156,805
1966–67 .	54,172	35,307	14,046	28,305	17,393	3,451	2,869	9,143	164,686
1967–68 .	57,643	35,774	14,781	30,012	17,771	3,590	2,824	9,440	171,835

(*a*) Excludes tenanted temporary dwellings. (*b*) Excludes temporary and emergency dwellings. (*c*) Number of occupied dwellings at 30 June.

Advances to home purchasers

Many prospective home purchasers wish to borrow for the purpose of constructing or purchasing their own homes. Usually the loan is covered by way of mortgage of the home to be constructed or bought. Such loans are provided from a number of private sources and from agencies owned or guaranteed by the State or Commonwealth Governments. The information in this section concerns the direct loans made to home purchasers by the more important institutional lenders. Loans to institutions which in turn lend moneys to home purchasers and loans to contract builders, etc. are excluded as far as possible. The loans may be for the construction of new dwellings, the purchase of existing dwellings, for additions, renovations, etc., as first or subsequent mortgages, overdrafts and so on. While figures of all loans to home purchasers are not available, the institutions mentioned account for a significant proportion of total loans. Details of the terms and conditions of lending are given, together with available information on the number and value of loans made.

State authorities and agencies

New South Wales

Rural Bank of New South Wales—Sale of Homes Agency. A Sale of Homes Agency was established in 1954 to arrange for the sale on terms of houses erected by the Housing Commission of New South Wales. The Agency's operations began with the sale to selected purchasers of 100 houses made available by the Commission during 1954–55 and 1955–56. The sales were made on the basis of 10 per cent deposit and repayment of the balance over a maximum period of forty years, with interest at 4½ per cent per annum. Total advances under that scheme amounted to $646,648; at 30 June 1968 the advances outstanding amounted to $372,173 in respect of 77 houses.

Since 1956 the Sale of Homes Agency has acted as the agent of the Housing Commission in arranging the sale on terms of houses erected under the Commonwealth-State Housing Agreements. The terms of sale provide for a minimum deposit of $100 and repayment of the balance over a maximum period of forty-five years, with interest rates, since the inception of the scheme, ranging from 4¼ to 5⅛ per cent per annum. Particulars of the advances made by the Agency in connection with the sale of houses erected under the 1956, 1961, and 1966 Agreements are given in the following table.

RURAL BANK OF NEW SOUTH WALES—SALE OF HOMES AGENCY ADVANCES FOR HOMES SOLD UNDER THE 1956, 1961 AND 1966 COMMONWEALTH-STATE HOUSING AGREEMENTS
1963-64 TO 1967-68

	Advances during year		*Advances outstanding at end of year(a)*	
Year	*Number of houses*	*Amount*	*Number of houses*	*Amount*
		$'000		$'000
1963–64 . . .	957	7,362	14,568	94,178
1964–65 . . .	1,777	14,356	16,042	105,648
1965–66 . . .	1,486	12,197	17,126	114,154
1966–67 . . .	1,073	9,005	17,763	119,077
1967–68 . . .	1,444	12,866	18,724	127,288

(*a*) Comprises principal outstanding and loan charges due but not paid.

The Sale of Homes Agency also acts as agent for the Housing Commission in arranging the sale of houses erected by the Commission on applicants' land. Under this scheme persons who have established a housing need may apply to the Commission to have a standard-type dwelling erected on their own land. The houses are sold, at a price equivalent to their capital cost, on the same terms as for houses erected under the 1956–1966 Housing Agreements. Up to 30 June 1968, 481 houses had been built under this scheme at a cost of $3,314,207; the balance of indebtedness at that date was $2,955,961.

Rural Bank of New South Wales—other loans. The Rural Bank of New South Wales provides assistance to individuals for the erection or purchase of homes and for other approved purposes associated with homes. Advances are based on the bank's official valuation of the dwelling. The rate of interest on long-term loans for housing purposes is 5½ per cent per annum.

RURAL BANK OF NEW SOUTH WALES: ADVANCES FOR HOMES
1963–64 TO 1967–68

	Advances during year(a)		*Advances outstanding at end of year(b)*	
Year	*Number of dwellings*	*Amount*	*Number of dwellings*	*Amount*
		$'000		$'000
1963–64 . . .	2,434	15,148	18,972	68,790
1964–65 . . .	2,613	18,250	19,936	76,450
1965–66 . . .	1,406	11,699	19,577	76,286
1966–67 . . .	1,578	13,256	19,398	77,587
1967–68 . . .	1,859	15,972	19,379	80,865

(*a*) The number of advances during a year represents the number of dwellings in respect of which an advance was first made in the year, but the amount of advances includes subsequent advances made in respect of the dwellings. (*b*) The number of advances outstanding at the end of a year represents the number of dwellings on which a debt was still outstanding. The amounts shown comprise principal outstanding and loan charges due but not paid.

Victoria

Housing Commission, Victoria. Very few houses were sold by the Commission until 1954. The amendments to the Commonwealth-State Housing Agreement in 1955–56 have had the effect of substantially increasing the number of houses sold. Whereas between 1949 and 1954 only about 100 houses were sold, a total of 25,644 houses were sold on terms to 30 June 1968, the total value of terms sales exceeding $207 million. Until 1964–65, houses were sold on a minimum deposit of $200, but during that year provision was made to sell without deposit in very special circumstances. The maximum repayment term is forty-five years with interest currently at 4½ per cent.

Home Finance Trust. In 1956 a Home Finance Trust was established with the object of receiving money from institutions and others in order to make loans for the erection or purchase of houses. Applicants for loans must declare that they intend to use the houses as homes for themselves, their families and dependants.

Loans granted are on the basis of a first mortgage over the house. Loans are not to exceed ninety-five per cent of the value of the security (house and land) and are not made if the value of the security exceeds $11,600. The house must not have been erected more than two years before the date of mortgage. Repayment of loans may be made over a maximum period of thirty years, with interest charges determined by the Trust. At 30 June 1968, 3,406 loans totalling $22,051,109 were outstanding.

In 1963 the Trust was empowered to make housing loans on the security of second mortgages subject to conditions similar to those applying to the first mortgage loans, except that the maximum term for repayment of a loan is ten years and no restriction is placed on the percentage of loan to valuation. At 30 June 1968, 1,915 second mortgage loans were outstanding, the amount involved being $2,188,720.

(*See* Savings Banks, page 241, for activities of the State Savings Bank of Victoria.)

Queensland

Queensland Housing Commission. The present maximum advance allowable under the Acts is $8,000 for a timber, brick veneer, brick, or concrete building. The rate of interest charged on new advances in 1967–68 was 5½ per cent per annum. Repayment may be made at the option of the borrower over either a thirty year or a forty-five year period.

Workers' dwellings. From 4 October 1962 the maximum advance under this scheme was increased to $7,000 for all types of workers' dwellings. This was increased to $8,000 from 2 June 1966. Total advances made for dwellings since operations commenced in 1910 to 30 June 1968 amounted to $67,295,327.

South Australia

South Australian Housing Trust Sales Schemes. Prospective purchasers of Housing Trust houses (other than Rental Purchase houses) may purchase either by paying cash or by paying a deposit and arranging for a loan on security of a first mortgage from any of the recognised lending authorities. In cases where the deposit and the first mortgage so raised are insufficient, the Trust may advance the balance of the house price on security of a second mortgage, the term of which is usually coterminous but not exceeding 30 years. The interest rate is 6¼ per cent and the principal is adjusted quarterly. During 1967–68 the Trust commenced 720 second mortgages valued at $1,205,000. At 30 June 1968 second mortgages totalled 8,979 and the balance outstanding at that date was $9,400,000. A minimum deposit of $100 is required for houses built under the Rental Purchase Scheme. The balance of the purchase price is repayable to the Trust in weekly instalments over periods up to 40 years at 4¾ per cent interest.

State Bank of South Australia. The State Bank, together with the Housing Trust, are the principal agents of the State Government for the distribution through the Home Builders' Fund of moneys received under the Commonwealth-State Housing Agreement. During 1967–68 the Bank opened 1,830 new accounts worth $12,610,372 in the Home Builders' Fund. The balance of loans in this Fund outstanding at 30 June 1968 totalled $74,889,425. In addition, during 1967–68, $721,435 was advanced to the public under the Advances for Homes Act, 1928–1958, which is administered by the Bank on behalf of the State Government. Under this Act 116 new accounts were opened during 1967–68, leaving a balance outstanding at 30 June 1968 of $24,833,052. The present maximum housing loan under either of these schemes is $8,000, repayable over a period not exceeding fifty years at a rate of interest of 5½ to 6¼ per cent per annum calculated on monthly balances.

Western Australia

State Housing Commission of Western Australia. Under the State Housing Act and the Commonwealth-State Housing Agreement the maximum loan is $8,000 by way of mortgage, while under contract of sale the maximum is $5,800 on the building plus the value of the land in the metropolitan area, and greater amounts in rural areas, depending on the circumstances.

To proceed under the mortgage conditions, a deposit of not less than 10 per cent is required, but under contract of sale the deposit may be as low as $200. The interest rate on all advances is 5⅜ per cent per annum and the repayment period is forty-five years. The income eligibility figure varies according to the movement of the basic wage, and currently an applicant in the Metropolitan Area cannot have an income exceeding $2,746 a year, plus $100 for each dependent child under twenty-one years of age. For the country the corresponding amount is $3,260 per annum plus $100 for each dependent child under twenty-one years, and north of the twenty-sixth parallel the Minister may allow families with an income of up to $4,326 plus $100 for each dependent child under twenty-one years of age to be given financial assistance. A second-mortgage scheme exists under the State Housing Act, which provides that assistance be limited to those applicants who are building or purchasing new homes, the cost of which, excluding land, does not exceed $10,000. The Commission limits the second mortgage to a maximum of $2,000.

(*See* Savings Banks, page 241, for activities of the Savings Bank Division of The Rural and Industries Bank of Western Australia.)

Tasmania

Housing Department. The interest rate on purchase contract loans from the Housing Department signed after 1 May 1965 is 4¼ per cent. To be eligible for a house on purchase contract terms an applicant must be married or about to be married, or have dependants for whom it is necessary to provide a home. The number of loans outstanding at 30 June 1968 was 6,633, and the amount outstanding $44,708,000.

Agricultural Bank of Tasmania. The Agricultural Bank, as an approved institution under the Commonwealth-State Housing Agreement, receives part of those funds allocated for advances to home builders. To be eligible for a loan an applicant must be married or about to be married, be over the age of twenty-one, and own a block of land. The maximum amount of an advance to an applicant is $8,000 for all types of houses in certain areas, provided that the total advance does not exceed ninety per cent of the Bank's valuation of land and dwelling. Advances to borrowers are repayable by equated instalments over thirty-one years. Advances made as from 1 July 1965 were at an interest rate of 5¾ per cent.

During 1967–68, 219 advances were approved, valued at $1,737,000. Since November 1945 a total of 3,675 loans amounting to $22,290,000 has been approved, of which 3,035 have been for erection of dwellings and 640 for the purchase of existing homes. Total advances outstanding at 30 June 1968 amounted to $16,172,000. These figures exclude advances to building societies.

Commonwealth authorities and Territories

Department of Housing

In December 1963 the Department of Housing was created, and to it were transferred the functions and staff of the War Service Homes Division and the Housing and Building Industry Branch of the Department of National Development. Further details relating to the Department of Housing may be found on page 83 of Year Book No. 50.

War service homes

The maximum amount of loan or advance which may be granted under the *War Service Homes Act* 1918–1968 is $8,000. The period of repayment may be up to forty-five years. In the case of a widow or widowed mother of an Australian ex-serviceman, the period may be extended to a maximum of fifty years.

The following table gives details of advances under the War Service Homes Act in each State and Territory of Australia, and the Territories of Papua, New Guinea and Norfolk Island, for the years 1963–64 to 1967–68. (*See* tables on pages 229–30 for the number of homes provided.)

WAR SERVICE HOMES ACT: ADVANCES FOR HOUSING, STATES AND TERRITORIES 1963-64 TO 1967-68

Period or date	*N.S.W.(a)*	*Vic.*	*Qld(b)*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Total*
TOTAL CAPITAL ADVANCED DURING YEAR ($'000)									
1963–64	26,502	21,300	8,100	5,078	6,770	1,584	22	660	70,016
1964–65	27,680	19,874	8,540	5,510	6,500	1,486	2	512	70,104
1965–66	27,052	19,716	9,667	6,172	5,310	1,562	28	503	70,010
1966–67	25,153	15,350	8,430	4,113	4,500	1,170	37	370	59,123
1967–68	19,635	11,346	6,800	2,997	3,520	1,195	3	523	46,019
NUMBER OF SECURITIES IN FORCE									
At end of June—									
1964	56,619	51,188	22,237	15,718	18,005	3,827	57	872	168,523
1965	58,899	52,493	22,698	16,008	18,348	3,889	51	927	173,313
1966	61,050	53,839	23,397	16,457	18,579	4,005	52	975	178,354
1967	63,011	54,434	23,894	16,583	18,555	4,035	54	998	181,564
1968	63,840	54,453	24,279	16,581	18,530	4,066	50	1,051	182,850
VALUE OF ADVANCES OUTSTANDING ($'000)									
At end of June—									
1964	278,856	233,648	90,326	67,900	83,364	16,976	(c)	(d)	771,070
1965	297,244	244,726	95,076	70,564	86,458	17,798	(c)	(d)	811,866
1966	313,915	255,695	100,938	74,117	88,513	18,684	(c)	(d)	851,862
1967	327,969	260,617	105,308	75,402	89,064	19,025	(c)	(d)	877,385
1968	335,040	261,680	108,139	75,476	88,508	19,277	(c)	(d)	888,120

(*a*) Includes Norfolk Island. (*b*) Includes Territory of Papua and New Guinea. (*c*) Included in South Australia. (*d*) Included in New South Wales.

Northern Territory

Loans Scheme. This scheme was commenced in 1953 and is administered by the Home Finance Trustee under the *Housing Loans Ordinance* 1949–1967. Advances may be made for the erection of a house, the purchase or enlargement of an existing house, the completion of a partially erected dwelling, or the discharge of a mortgage already existing. Loans are provided on a deposit of 5 per cent of the first $4,000 and 10 per cent of the balance of the Trustee's valuation up to a maximum of $8,000. The rate of interest charged is 6½ per cent per annum reducible to 5½ per cent per annum if instalment payments are made by the due date. The maximum period of repayment is forty-five years. Up to 30 June 1968, 1,232 loans totalling $6,916,530 had been approved. These were for: erection, 747; purchase, 370; enlargement or completion, 60; discharge of mortgage, 55.

Sales Scheme. Tenants of government-owned houses under the control of the Administration may purchase the dwellings they occupy either for cash or on terms requiring a minimum deposit of 5 per cent of the first $4,000 and 10 per cent of the balance of the purchase price with repayments over a maximum period of forty-five years including interest at 4½ per cent per annum.

Housing Commission Sales Scheme. Since the November 1963 amendment of the *Housing Ordinance* 1959–1968 the Housing Commission has been permitted to sell its houses to tenants in occupation. The terms require a minimum cash deposit of $200 and repayment of the remainder of the loan over a period not exceeding forty-five years; there is no prescribed limit to the amount of the loan and the rate of interest is fixed by the Commission from time to time.

Australian Capital Territory

Loans may be granted by the Commissioner for Housing to enable persons to purchase or build a new house in the Australian Capital Territory. Where the Commissioner's valuation does not exceed $4,000 the maximum loan may not exceed ninety-five per cent of the valuation. If the Commissioner's valuation exceeds $4,000 the maximum loan is ninety-five per cent of the first $4,000 and ninety per cent of the balance (but in no case can the amount lent exceed $8,000). Repayment may be made over a maximum period of forty-five years. The current rate of interest is 6 per cent per annum with a concession of 1 per cent for payments made on or before the due date. At 30 June 1968, 5,179 houses were under mortgage to the Commissioner.

Government rental houses may be purchased by tenants. The basis of the sale is a minimum deposit of 5 per cent of the purchase price fixed by the Department of the Interior with no limit to the amount which may be held on mortgage from the Department. Repayment of the amount covered by mortgage may be made over a maximum period of forty-five years. The interest rate is 6 per cent per annum with a concession of 1 per cent for payments made on or before the due date. To 30 June 1968, 6,482 houses had been sold to tenants.

Papua and New Guinea

Under authority of the *Housing Loans Ordinance* 1953–1963 the Commissioner for Housing may make advances to any member of the community for the erection of a house, the purchase or enlargement of an existing house, the completion of a partially erected dwelling, or the discharge of a mortgage already existing. The maximum loan is $7,000. The maximum period of repayment is twenty-five years for timber and thirty-five years for brick dwellings. The Commissioner's responsibilities were transferred to the Housing Commission on 1 July 1968. Minimum cash deposit is 5 per cent of the first $4,000 plus 10 per cent of the remainder of the Commissioner's valuation. The effective rate of interest is 5 per cent per annum. Up to 30 June 1968, 430 loans totalling $2,296,635 had been approved.

Savings banks

All savings banks lend funds for housing to both individuals and building societies. Separate figures of loans to individuals are not available. The amounts outstanding on housing loans of all savings banks (including loans to building societies) were $1,359 million, $1,549 million and $1,751 million at the end of June 1966, 1967 and 1968 respectively. Some details in respect of three savings banks are shown below.

State Savings Bank of Victoria. The Bank grants long-term loans to depositors to enable them to build, purchase or improve homes. These loans are granted by both the Crédit Foncier and Savings Bank Departments.

The maximum proportion of valuation to be granted as Crédit Foncier loan is eighty per cent and the maximum loan is $8,000. Interest is 5½ per cent and the term of the loan is ten years, subject to renewal. The maximum proportion of valuation granted as Savings Bank Department loan is seventy-five per cent and the maximum loan is $12,000. For a property to be occupied by the borrower the interest rate is 6 per cent to 6½ per cent, depending on the amount of the loan; in other cases the interest rate is 7 per cent. During the year 1967–68 the Bank advanced $63,232,004 to 9,217 borrowers in addition to $272,130 to Co-operative Housing Societies and $250,000 to the Home Finance Trust. At 30 June 1968 the total debt of 64,420 individual borrowers was $326,805,545, while indebtedness of Co-operative Housing Societies and the Home Finance Trust amounted to $15,226,431 and $9,437,689 respectively.

Savings Bank of South Australia. The Bank grants mortgage loans for the building or purchase of houses for personal occupation, the maximum loan available being $8,000 for all types of homes. Normally advances are made up to 85 per cent of the Bank's valuation but, if the loan is granted under the Homes Act, 1941–1962, 95 per cent of such valuation may be advanced (maximum loan, $6,000). The maximum loan period is thirty years at a rate of interest of 5¾ per cent per annum; this rate is subject to review after five years. During 1967–68 the Bank advanced $16,665,513 by way of housing loans, the number of new loans totalling 2,297. At 30 June 1968 there were 25,768 housing loans current with a balance outstanding of $124,121,220.

Rural and Industries Bank of Western Australia (*Savings Bank Division*). The Rural and Industries Bank of Western Australia is authorised by the *Rural and Industries Bank Act, 1944–1966* to make loans from moneys on deposit with its Savings Bank Division to a person or body for the purchase or erection of a dwelling. It is the policy of the Bank to provide funds for housing primarily for occupancy by the borrower. There is no fixed limit on the amount of a loan. The average loan in the case of a brick or timber house is $8,500. The rate of interest varies with the current bank rate and is usually ¾ per cent lower. The rate at 30 June 1968 was 5¼ per cent, but on 1 August 1968 it was increased to 6 per cent. The average term of housing loans is twenty-two years.

The bank undertakes the sub-division and development of land and the erection of homes which are sold under conditions which ensure that the purchasers are genuine home seekers. This home building activity commenced in May 1967. The number of homes built to 30 June 1968 was 30, whilst at that date a further 35 were under construction.

Trading banks

Apart from loans by certain State banks as Government agencies (*see* pages 236–9) advances for housing to individuals are also provided by the trading banks. Amounts outstanding in respect of advances to individuals for housing purposes made by the major trading banks were $287 million on the second Wednesday of July 1968 (*see* the chapter Private Finance for further details).

Life insurance companies

The life insurance companies are another source of funds for housing. Details of new loans made during the twelve months ended June 1964 to 1968 are given in the following table.

LIFE INSURANCE COMPANIES: HOUSING LOANS PAID OVER STATES AND TERRITORIES, 1963-64 TO 1967-68

State or Territory	*Amount ($'000)* *1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
New South Wales	19,976	23,073	24,821	22,486	23,729
Victoria	14,742	17,788	17,112	16,843	19,471
Queensland(*a*)	3,510	5,665	5,538	4,856	4,918
South Australia(*b*)	3,334	4,686	4,808	4,371	4,559
Western Australia	2,488	3,561	3,563	4,157	5,331
Tasmania	1,530	1,396	1,526	1,321	1,171
Australian Capital Territory	396	827	869	945	631
Total	**45,976**	**56,995**	**58,237**	**54,979**	**59,810**

(*a*) Includes loans made in Papua and New Guinea. (*b*) Includes loans made in Northern Territory.

Amounts outstanding at the end of June 1964, 1965, 1966, 1967 and 1968 in respect of housing loans made by insurance companies were $323 million, $339 million, $356 million, $366 million and $378 million respectively.

Registered building societies

There are 4,203 registered building societies operating in Australia, of which 143 are permanent societies and the remainder terminating societies. The permanent societies are in the main investment societies which make loans for housing purposes, usually on crédit foncier terms, and obtain their funds from share capital deposits and borrowings from banks and other lending institutions. The terminating societies are co-operative societies which make loans to members from funds obtained from lending institutions (usually government guaranteed), members' subscriptions, and, since 1956, from moneys provided under the Commonwealth-State Housing Agreements. Details of new loans paid over and net advances outstanding for each of the years ended June 1963 to 1967 are given in the following table (*see also* the chapter Private Finance).

REGISTERED BUILDING SOCIETIES: STATES, 1962-63 TO 1966-67

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
LOANS PAID OVER DURING YEAR ($'000)							
1962–63	53,445	29,843	13,164	2,833	7,270	4,072	110,627
1963–64	72,284	30,880	13,184	3,102	10,430	5,721	135,601
1964–65	82,329	37,007	16,550	3,819	13,091	6,445	159,241
1965–66	90,635	34,357	18,559	3,521	12,611	5,425	165,108
1966–67	112,443	37,688	20,641	4,412	14,031	6,337	195,553
NET ADVANCES OUTSTANDING(*a*) AT END OF YEAR ($'000)							
1962–63	317,221	189,466	48,776	12,530	28,216	14,464	610,673
1963–64	351,841	199,704	55,543	13,967	35,483	17,798	674,336
1964–65	393,343	214,288	64,449	15,790	44,171	21,413	753,454
1965–66	441,676	225,778	74,659	17,238	52,182	23,767	835,302
1966–67	507,093	238,819	85,730	19,470	61,015	26,659	938,785

(*a*) Net of borrowing members' funds.

Other lenders

Little information is available on advances made by other lenders such as superannuation and other trust funds, private finance and investment companies, etc. In South Australia advances on first mortgage made by the South Australian Superannuation Fund are granted under the Homes Act, 1941–1968, by which the State Government guarantees up to 25 per cent of the value of the mortgage, thus raising the limit of the advance. Loans so made are limited to 95 per cent of the Superannuation Board's valuation to a maximum of $6,000, or 85 per cent of the Board's valuation to a maximum of $8,000. The rate of interest is 6¼ per cent per annum, calculated on quarterly balances, reducing to 5¾ per cent when payments are made within a prescribed period of twenty-one days from the end of the quarter. The term of the mortgage may run for thirty years on a stone or brick home or twenty years on a timber-framed construction. Trustee mortgages may be granted as an alternative to the foregoing. A maximum of 70 per cent of the Board's valuation may be granted for a trustee mortgage, other conditions being those applicable to mortgages granted under the Homes Act. At 30 June 1968 there were 5,796 loans current, the principal outstanding totalling $25,395,349. During 1967–68 the value of advances made was $3,015,779.

CHAPTER 10

LABOUR, WAGES AND PRICES

For particulars of the Farm Production Price Index, *see* the chapter Miscellaneous. For current information on the subjects dealt with in this chapter, *see* the *Monthly Review of Business Statistics*, the *Digest of Current Economic Statistics* (monthly), and the *Quarterly Summary of Australian Statistics*, also the mimeographed statements *Wage Rates and Earnings*, *Consumer Price Index*, *Wholesale Price* (*Basic Materials and Foodstuffs*) *Index*, *Wholesale Price Indexes—Price Index of Electrical Installation Materials*, and *Export Price Index*. For further information on these subjects, except the Export Price Index, *see* the *Labour Report* issued by this Bureau.

RETAIL PRICES AND PRICE INDEXES

Retail prices of food and groceries and average rentals of houses for years extending back to 1901 have been collected by the Commonwealth Statistician, and in some cases were recorded by the Statisticians of various States for earlier years.

Retail prices of a more extensive range of commodities (including clothing) and certain services in common demand have been ascertained at frequent and regular intervals since 1923, and comparable information was ascertained for the month of November in each year from 1914 to 1922. The range of items for which retail prices data are obtained was considerably expanded in 1948 and in later years. Average retail prices of certain food and grocery items in current periods are published in the annual *Labour Report*.

An explanation of the nature and purposes of retail price indexes is given in the various editions of the annual *Labour Report*, together with further particulars of indexes then current. Previous retail price indexes for Australia are briefly described below. The current retail price index, entitled the Consumer Price Index, was published for the first time in August 1960. It was compiled retrospectively to 1948–49. A description of the Consumer Price Index is given on pages 246–7.

Previous retail price indexes

Five series of retail price indexes had been compiled at various times for Australia by the Commonwealth Statistician prior to 1960. Each of these was continued until changed conditions required the compilation of indexes more directly relevant to current conditions. The respective indexes were as follows.

(i) *The 'A' Series Index* (covering food, groceries and house rents) was first compiled in 1912 with the year 1911 as base = 1,000. It was discontinued in June 1938.

(ii) *The 'B' Series Index* (covering food, groceries and rent of 4 and 5 roomed houses) was first compiled in 1925 and continued until December quarter 1953. It was the food and rent constituent of the 'C' Series Index and was designed to replace the 'A' Series Index for general statistical purposes.

(iii) *The 'C' Series Index* (covering food and groceries, rent of 4 and 5 roomed houses, clothing, household drapery, household utensils, fuel, lighting, fares, smoking, and some other miscellaneous items) was first compiled in 1921. It was last issued on its original basis for December quarter 1960. For certain transitional purposes a 'C' Series Index was issued for some quarters after that. This was calculated by varying the index numbers of December quarter 1960 in proportion to movements shown by the Consumer Price Index.

(iv) *The 'D' Series Index*, derived by combining the 'A' and 'C' Series Indexes, was used by the Commonwealth Court of Conciliation and Arbitration from May 1933 to May 1934 and then discontinued.

(v) *The Interim Index* (covering food and groceries, rent of 4 and 5 roomed houses, clothing, household drapery, household utensils, fuel, lighting, fares, smoking, certain services and some miscellaneous items) was first compiled in 1954 with the year 1952–53 as base = 100. As its title indicated, it was constructed as a transitional index. Its compilation was discontinued following its replacement by the Consumer Price Index in June quarter 1960.

An index of retail price movements from 1901 to 1968 is shown on page 251 of this Year Book. It is derived by linking together successive indexes (the 'A' Series, the 'C' Series and the Consumer Price Index) available for that period.

In 1937 the Commonwealth Court of Conciliation and Arbitration introduced a 'Court' Index for the purpose of its system of making automatic quarterly adjustments to the basic wage within its jurisdiction. By decision of the Court the 'Court' Index ceased to be issued by the Industrial Registrar as at December quarter 1953. These 'Court' Index numbers were an arithmetical conversion of the 'C' Series Retail Price Index.

Consumer Price Index

This retail price index was first compiled in 1960, retrospectively to September quarter 1948. A full description of the index up to December quarter 1968 is given in *Labour Report* No. 52, 1965 and 1966. The Consumer Price Index, a chain of 'fixed weight aggregative' indexes linked at short intervals to form a continuous series, was further linked at December quarter 1968. The reference base year has also been changed from 1952–53 = 100.0 to 1966–67 = 100.0. Details of these changes were published in the bulletin *Consumer Price Index*, March quarter 1969, (ref. No. 9.1) and will be published also in *Labour Report* No. 53, 1967.

Origin

The list of component items and the weighting pattern of the 'C' Series Retail Price Index, first adopted in 1921, were slightly revised by a Conference of Statisticians in 1936, but otherwise continued almost unchanged until the index was discontinued in 1960. The reasons for this and the circumstances which led to the present Consumer Price Index appear from ensuing paragraphs.

From the outbreak of war in 1939 to late in 1948, periodic policy changes in regard to various war-time controls (including rationing) caused recurrent changes in consumption and in the pattern of expenditure. This rendered changes desirable, but made it impracticable either to produce a new index, or to revise the old one, on any basis that would render the index more representative than it already was of the changing pattern of household expenditure in those years.

When commodity rationing had virtually ceased in the latter part of 1948, action was taken by the Statistician to collect price data of about 100 additional items and to gather information about current consumption and expenditure patterns. This was done to facilitate review of the component items and weighting system of the 'C' Series Retail Price Index in the light of the new pattern of wage-earner expenditure and consumption that appeared to be emerging. But there supervened, in the next few years, conditions which caused wide price dispersion coupled with a very rapid rise in prices and a new sequence of changes in consumption and in the pattern of wage-earner expenditure. Under these conditions it was not possible to devise any new weighting pattern likely to be more continuously representative of conditions then current than was the existing 'C' Series Retail Price Index on the 1936 revision.

A Conference of Statisticians considered the matter in June 1953, and resolved (in part) as follows:

'(*a*) that, in view of the persistence of recurrent changes in the pattern of consumer expenditure in the post-war period it is undesirable to make a general revision of the list of items and weighting system of the 'C' Series Retail Price Index at present, unless industrial tribunals expressly desire some revision for special purposes;

(*b*) that an Interim Retail Price Index be compiled with putative weights and components representative, as nearly as may be, of the post-war pattern of consumer usage and expenditure.'

The 'C' Series Index continued to be compiled on its pre-war basis without significant change in procedures. The Interim Retail Price Index was introduced in 1954 and continued until March quarter 1960.

The Interim Index was a transitional index designed to measure retail price variations on the 'C' Series model in terms of post-war consumption weights as emerging in the early 1950's. It embraced a wider range of commodities and services than did the 'C' Series Retail Price Index, but it did not take into account successive major changes in the pattern of expenditure and modes of living that began to occur early in 1950 and through to 1960. These changes could not in fact be detected and measured promptly and incorporated into an index concurrently with their happening. Nor was it envisaged as desirable to adopt fundamentally new procedures in price index construction until it was fully evident that far-reaching procedural changes were necessary to meet the situation that had developed between about 1950 and 1960.

In this period home-owning largely replaced house-renting, the use of the motor car greatly increased and partly replaced use of public transport, and various items of electrical household equipment and television came into widespread use. The impact of these (and other) changes in usage upon the pattern of household expenditure was heightened by disparate movements in prices. Together, they rendered nugatory the attempt to meet the situation by devising a single Interim Retail Price Index. As studies progressed and new data became available it was clear that no single list of items and no single set of fixed weights would be adequately representative as a basis for measuring retail price changes at all times throughout the post-war period. In consequence, the situation was met by compiling the Consumer Price Index constructed as a chain of linked indexes with significant changes in composition and weighting effected at short intervals.

Purpose, scope and composition

The Consumer Price Index is a quarterly measure of variations in retail prices for goods and services representing a high proportion of the expenditure of wage-earner households. The weighting pattern relates to estimated aggregates of wage-earner household expenditures and not to estimated expenditures of an 'average' or individual household of specified size, type, or mode of living. In this way it is possible to give appropriate representation to owner-occupied houses as well as rented houses and to include motor cars, television sets, and other major expenditures which relate to some households and not to others.

Consumer (retail) price indexes are sometimes loosely called 'cost of living indexes' and are thought to measure changes in the 'cost of living'. Neither the Consumer Price Index nor any other retail price index measures those changes in the cost of living that result directly from changes in the mode or level of living. Changes of that kind are matters for consideration apart from price indexes, but the change in prices of goods and services is a very important part of the change in the cost of living and this part is measured by consumer (retail) price indexes.

The Consumer Price Index covers a wide range of commodities and services arranged in the following five major groups:

Food;
Clothing and drapery;
Housing;
Household supplies and equipment;
Miscellaneous.

These groups do not include every item of household spending. It is both impracticable and unnecessary for them to do so. Prices are collected regularly for specified quantities and qualities of a large and representative selection of commodities and services. Movements in the prices of these items, when combined in suitable proportions, provide a representative measure of price change as affecting a high proportion of the expenditure of wage-earner households.

Structure—a chain of linked indexes

Substantial changes have occurred in consumer usage and patterns of expenditure since the 1939–45 War. In order to keep the weighting pattern representative of current expenditures it has been necessary to construct indexes with additional items and changes in the weighting pattern at intervals, rather than on the basis of a list of items and set of weights that remained unchanged throughout the whole period covered. For the six State capital cities six series for short periods (namely, from the September quarter of 1948 to the June quarter of 1952, from the June quarter of 1952 to the June quarter of 1956, from the June quarter of 1956 to the March quarter of 1960, from the March quarter of 1960 to the December quarter of 1963, from the December quarter of 1963 to the December quarter of 1968, and from the December quarter of 1968 onwards) have therefore been constructed and linked to form a continuous retail price index series known as the Consumer Price Index. (For information regarding these links for Canberra *see Labour Report* No. 52, 1965 and 1966.)

During each period between links the items and weighting remained unchanged. At times of linking the weighting pattern was altered, and new items (mainly ones that had become significant in household expenditure) were introduced. Under this method, in effect, average percentage price movements are assessed on one pattern up to the time of the link and on another pattern thereafter. The process of linking ensures that the series reflects only price variations and not differences in cost of the old and new lists of items. The introduction of new items and weights by linking does not, of itself, raise or lower the level of the index.

Tabular statements of retail price index numbers

Consumer Price Index

The index has been compiled for each quarter from September quarter 1948 and for each year from 1948–49. 'All Groups' index numbers and 'Group' index numbers for each of the five major groups are compiled and published regularly for the six State capital cities separately and combined and for Canberra. The reference base for each of these indexes is: year 1952–53 = 100.0. Figures appearing after the decimal point possess little significance for general statistical purposes. They are inserted to avoid distortions that would occur in rounding off the figures to the nearest whole number.

Index numbers for each quarter are first issued in mimeographed statistical bulletins available from the Commonwealth Statistician about three weeks after the end of the quarter. These bulletins contain comment on the index and on significant price movements in that quarter. Tables showing index numbers for preceding quarters and years are presented.

The following table shows Consumer Price Index Numbers (Total all groups) for the six State capital cities separately and combined and for Canberra, for periods from the year 1951–52.

CONSUMER PRICE INDEX: ALL GROUPS INDEX NUMBERS
SIX STATE CAPITAL CITIES AND CANBERRA, YEARS 1951–52 TO 1967–68 AND QUARTERS MARCH 1966 TO DECEMBER 1968

(*Base of each index: year* 1952–53 = 100.0)(*a*)

The separate city indexes measure price movements within each city individually. They do not compare price levels as between cities.

	State Capital Cities—separately and combined							
Period	*Six State Capital Cities*(*b*)	*Sydney*	*Melbourne*	*Brisbane*	*Adelaide*	*Perth*	*Hobart*	*Canberra*
Year—								
1951–52	91.4	91.9	91.0	91.8	91.4	90.4	90.4	91.1
1952–53	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
1953–54	102.0	101.6	102.0	102.0	102.3	103.0	105.0	102.9
1954–55	102.6	102.3	102.0	102.9	103.5	105.2	104.9	104.2
1955–56	106.9	105.7	108.1	106.3	106.9	107.9	110.2	107.8
1956–57	113.1	112.9	114.0	112.0	111.1	112.9	116.9	113.3
1957–58	114.2	114.5	114.4	114.4	111.9	113.6	117.0	114.0
1958–59	116.0	115.3	116.6	118.2	114.5	114.7	118.7	115.4
1959–60	118.9	117.8	120.0	121.2	118.0	116.9	120.8	117.8
1960–61	123.8	122.1	125.9	125.4	122.9	121.2	127.5	121.4
1961–62	124.3	122.6	126.3	127.3	122.5	121.6	128.1	123.1
1962–63	124.5	123.2	126.2	127.7	122.1	122.2	128.0	123.4
1963–64	125.7	124.5	127.1	129.0	123.5	123.8	129.4	124.3
1964–65	130.4	128.8	132.2	133.9	128.6	127.6	133.6	128.1
1965–66	135.2	133.1	137.1	140.4	132.7	132.5	138.3	131.9
1966–67	138.8	136.3	140.7	144.0	136.9	137.9	141.2	134.5
1967–68	143.4	140.6	145.9	148.8	140.8	141.9	147.7	138.0
Quarter—								
1966—March	135.4	133.3	137.2	141.4	133.1	132.8	138.1	132.0
June	136.5	134.0	138.5	141.7	134.4	135.3	139.3	132.4
September	137.1	134.7	139.1	142.5	135.0	136.3	139.2	133.0
December	138.4	136.2	140.1	143.6	136.5	136.9	140.1	134.0
1967—March	138.9	136.4	140.7	144.4	137.2	138.3	142.0	134.6
June	140.6	137.8	142.9	145.5	138.9	140.1	143.3	136.2
September	142.5	139.7	144.8	148.0	140.5	140.7	147.2	137.4
December	142.9	140.3	145.3	148.3	139.7	141.3	148.2	137.7
1968—March	143.5	140.7	146.0	149.4	140.5	142.2	147.6	138.0
June	144.6	141.7	147.4	149.4	142.6	143.4	147.7	138.7
September	145.2	142.3	147.9	150.7	142.6	143.8	148.3	139.2
December	146.7	144.3	149.2	151.6	144.0	144.7	149.4	139.7

(*a*) Figures appearing after the decimal point possess little significance for general statistical purposes. They are inserted to avoid distortions that would occur in rounding off the figures to the nearest whole number. (*b*) Weighted average.

The following table shows Consumer Price Index Group Index Numbers for the six State capital cities combined for periods from the year 1951–52.

CONSUMER PRICE INDEX: GROUP INDEX NUMBERS WEIGHTED AVERAGE OF SIX STATE CAPITAL CITIES, YEARS 1951–52 TO 1967–68 AND QUARTERS MARCH 1964 TO DECEMBER 1968

(*Base of each index: year* 1952–53 = 100.0) (*a*)

Period	*Food*	*Clothing and drapery*	*Housing*	*Household supplies and equipment*	*Miscel-laneous*	*All groups*
Year—						
1951–52	89.9	93.5	89.1	92.9	92.3	91.4
1952–53	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
1953–54	103.5	100.7	104.8	101.6	99.9	102.0
1954–55	104.3	101.0	108.4	101.4	99.9	102.6
1955–56	110.2	102.0	115.1	101.6	105.9	106.9
1956–57	115.3	103.9	122.1	105.8	118.0	113.1
1957–58	113.3	107.0	127.3	107.5	119.7	114.2
1958–59	115.4	108.2	130.6	108.7	121.2	116.0
1959–60	119.8	109.4	135.2	109.8	123.9	118.9
1960–61	127.7	111.6	144.8	111.2	127.3	123.8
1961–62	125.5	112.8	150.7	112.7	128.1	124.3
1962–63	124.3	113.2	155.0	112.4	128.8	124.5
1963–64	126.0	114.0	159.6	111.0	129.9	125.7
1964–65	133.0	115.6	165.0	111.9	136.1	130.4
1965–66	139.3	117.0	171.9	113.8	142.5	135.2
1966–67	141.6	119.5	179.3	115.1	148.9	138.8
1967–68	148.2	122.1	187.2	116.5	153.1	143.4
Quarter—						
1964—March	126.0	113.8	159.9	111.1	130.1	125.8
June	128.5	114.6	161.7	111.4	130.3	127.0
September	130.7	115.0	163.0	110.7	133.1	128.5
December	132.1	115.4	164.4	111.3	136.5	130.0
1965—March	133.1	115.8	165.3	112.5	137.3	130.9
June	135.9	116.3	167.2	112.9	137.3	132.1
September	139.3	116.3	168.6	113.4	137.8	133.5
December	139.5	116.6	171.4	113.7	142.7	135.2
1966—March	138.4	116.9	172.4	113.7	144.7	135.4
June	139.8	118.0	175.3	114.5	144.8	136.5
September	139.7	118.2	176.6	114.7	146.9	137.1
December	140.7	119.3	178.4	115.1	148.9	138.4
1967—March	141.6	119.7	179.5	115.0	149.3	138.9
June	144.2	120.8	182.5	115.6	150.4	140.6
September	148.3	121.2	184.4	115.8	151.5	142.5
December	147.0	122.0	186.7	116.3	153.1	142.9
1968—March	148.0	122.3	187.6	116.4	153.5	143.5
June	149.4	122.9	190.0	117.3	154.3	144.6
September	149.0	123.5	191.3	117.5	156.4	145.2
December	149.3	124.4	194.9	118.2	159.7	146.7

(*a*) Figures appearing after the decimal point possess little significance for general statistical purposes. They are inserted to avoid distortions that would occur in rounding off the figures to the nearest whole number.

The following table shows Consumer Price Index Group Index numbers for each State capital city and for Canberra for recent years and quarters.

CONSUMER PRICE INDEX: GROUP INDEX NUMBERS SIX STATE CAPITAL CITIES AND CANBERRA, YEARS 1948–49 TO 1967–68 AND QUARTERS MARCH TO DECEMBER 1968

(*Base of each index: year* 1952–53 = 100.0) (*a*)

The index numbers hereunder are designed to measure movements in retail prices of specified groups of items for specified cities individually. They measure variations from time to time and not differences in price level as between cities.

City	*Year*						*1968*			
	1948–49	*1952–53*	*1964–65*	*1965–66*	*1966–67*	*1967–68*	*March qtr*	*June qtr*	*Sept. qtr*	*Dec. qtr*
FOOD GROUP										
Six State Capitals(*b*)	54.1	100.0	133.0	139.3	141.6	148.2	148.0	149.4	149.0	149.3
Sydney	52.2	100.0	129.6	136.2	137.8	143.1	143.0	143.4	143.4	143.9
Melbourne	54.9	100.0	133.9	139.5	140.9	149.8	149.5	151.6	150.7	151.3
Brisbane	56.4	100.0	141.5	150.9	153.5	159.1	160.5	159.2	159.4	159.7
Adelaide	56.1	100.0	136.6	141.2	145.5	152.3	150.9	156.7	155.3	154.7
Perth	55.0	100.0	130.5	136.6	143.5	147.6	147.6	149.5	148.8	148.2
Hobart	56.0	100.0	134.5	141.4	143.1	152.8	151.5	150.4	150.3	150.6
Canberra	51.9	100.0	129.4	135.4	138.1	144.0	143.4	144.8	145.4	145.1
CLOTHING AND DRAPERY GROUP										
Six State Capitals(*b*)	58.4	100.0	115.6	117.0	119.5	122.1	122.3	122.9	123.5	124.4
Sydney	58.0	100.0	114.2	115.6	118.2	120.8	121.1	121.6	122.1	123.0
Melbourne	58.6	100.0	116.8	118.1	120.5	123.1	123.2	123.9	124.5	125.5
Brisbane	59.2	100.0	119.5	121.0	123.7	126.7	126.9	127.5	128.1	128.7
Adelaide	58.3	100.0	114.4	115.5	118.1	120.7	120.8	121.5	122.1	123.2
Perth	59.6	100.0	114.1	115.4	117.9	120.5	120.6	121.3	122.0	123.1
Hobart	58.0	100.0	116.7	117.9	120.3	123.1	123.3	124.0	124.5	125.7
Canberra	57.8	100.0	113.1	114.4	116.9	119.6	119.8	120.2	120.8	121.5
HOUSING GROUP										
Six State Capitals(*b*)	72.5	100.0	165.0	171.9	179.3	187.2	187.6	190.0	191.3	194.9
Sydney	74.2	100.0	166.6	172.3	180.9	189.8	190.0	193.6	194.4	198.9
Melbourne	76.0	100.0	169.2	177.2	184.0	191.1	191.6	193.9	194.6	198.1
Brisbane	67.1	100.0	149.0	158.3	162.8	172.2	172.4	173.4	176.7	177.8
Adelaide	68.7	100.0	164.6	171.1	178.8	182.5	182.8	183.2	184.0	186.3
Perth	62.7	100.0	160.0	165.6	173.7	183.8	184.9	187.3	190.6	195.1
Hobart	70.3	100.0	180.8	185.9	191.4	198.2	199.1	200.4	201.9	207.4
Canberra	70.9	100.0	164.4	166.9	169.4	170.0	170.3	171.3	171.7	171.8
HOUSEHOLD SUPPLIES AND EQUIPMENT GROUP										
Six State Capitals(*b*)	67.0	100.0	111.9	113.8	115.1	116.5	116.4	117.3	117.5	118.2
Sydney	67.0	100.0	110.7	111.4	112.2	113.5	113.2	114.6	114.4	114.8
Melbourne	66.1	100.0	115.2	118.7	120.3	122.0	122.1	123.0	123.0	124.0
Brisbane	68.6	100.0	112.7	115.0	116.5	117.9	117.8	118.5	120.6	121.4
Adelaide	69.5	100.0	104.9	106.2	107.1	107.4	107.3	107.6	107.7	108.1
Perth	66.5	100.0	106.4	108.1	110.0	110.7	110.7	111.4	111.6	112.1
Hobart	68.1	100.0	124.5	125.7	127.5	131.2	131.7	132.3	132.7	132.8
Canberra	69.8	100.0	113.2	113.4	113.7	114.1	114.2	114.0	114.0	114.3
MISCELLANEOUS GROUP										
Six State Capitals(*b*)	66.6	100.0	136.1	142.5	148.9	153.1	153.5	154.3	156.4	159.7
Sydney	67.7	100.0	135.1	140.4	145.6	149.9	150.3	151.1	153.2	158.3
Melbourne	64.4	100.0	138.3	145.2	152.7	156.5	156.9	157.9	160.7	162.7
Brisbane	69.2	100.0	140.9	148.7	155.8	160.8	161.1	161.5	163.5	165.3
Adelaide	67.2	100.0	129.6	136.4	142.6	146.3	146.6	146.9	148.0	152.6
Perth	67.7	100.0	134.2	142.1	149.1	153.9	154.7	155.0	155.8	157.1
Hobart	63.1	100.0	133.5	140.3	145.1	151.6	152.1	152.8	154.3	155.7
Canberra	69.7	100.0	129.3	134.8	138.9	143.1	143.6	144.2	145.1	146.7

(*a*) Figures appearing after the decimal point possess little significance for general statistical purposes. They are inserted to avoid distortions that would occur in rounding off the figures to the nearest whole number. (*b*) Weighted average.

Retail Price Index Numbers, 1901 to 1968

The index numbers shown below are presented as a continuous series, but they give only a broad indication of long-term trends in retail price levels. They are derived by linking a number of indexes that differ greatly in scope. The successive indexes used are: from 1901 to 1914, the 'A' Series Retail Price Index; from 1914 to 1946–47, the 'C' Series Retail Price Index; from 1946–47 to 1948–49, a composite of Consumer Price Index Housing Group (partly estimated) and 'C' Series Index excluding Rent; and from 1948–49 onwards, the Consumer Price Index.

RETAIL PRICE INDEX NUMBERS: SIX STATE CAPITAL CITIES COMBINED, 1901 TO 1968

(*Base: year* 1911 = 100)

Year	*Index number*	*Year*	*Index number*	*Year*	*Index number*
1901	88	1923	166	1946	190
1902	93	1924	164	1947	198
1903	91	1925	165	1948	218
1904	86	1926	168	1949	240
1905	90	1927	166	1950	262
1906	90	1928	167	1951	313
1907	90	1929	171	1952	367
1908	95	1930	162	1953	383
1909	95	1931	145	1954	386
1910	97	1932	138	1955	394
1911	100	1933	133	1956	419
1912	110	1934	136	1957	429
1913	110	1935	138	1958	435
1914(*a*)	114	1936	141	1959	443
1915(*a*)	130	1937	145	1960	459
1916(*a*)	132	1938	149	1961	471
1917(*a*)	141	1939	153	1962	469
1918(*a*)	150	1940	159	1963	472
1919(*a*)	170	1941	167	1964	483
1920(*a*)	193	1942	181	1965	502
1921(*a*)	168	1943	188	1966	517
1922(*a*)	162	1944	187	1967	534
		1945	187	1968	548

(*a*) November.

International comparisons

The following table shows index numbers of consumer (retail) prices for various countries. Except where otherwise noted, the year 1963 is taken as base (= 100). The index numbers show fluctuations in prices in each country, and do not measure relative price levels as between countries.

INDEX NUMBERS OF CONSUMER (RETAIL) PRICES IN VARIOUS COUNTRIES ALL GROUPS INDEXES, 1960 TO 1968

(*Source: Monthly Bulletin of Statistics* of the Statistical Office of the United Nations)
(*Base of each index: year* 1963 = 100)

Period	*Argentina (Buenos Aires)*	*Australia (a)*	*Belgium*	*Brazil (Sao Paulo)*	*Canada*	*France (b)*	*Germany, Federal Republic*	*India*	*Indonesia (Djakarta)*	*Ireland*	*Italy*
1960	55	97	96	27	96	92	92	92	13	91	87
1961	63	100	97	38	97	95	94	94	17	94	89
1962	81	100	98	58	98	95	97	97	46	98	93
1963	-100-	-100-	100	100	100	100	100	100	100	100	100
1964	122	102	104	187	102	103	102	113	205	107	106
1965	157	106	108	303	104	106	106	124	830	112	111
1966	207	110	-113-	444	108	109	110	137	9,502	115	-113-
1967	268	113	116	576	112	112	111	156	25,612	119	118
1968	311	116	119	715	117	117	113	160	57,712	125	119
1968– Qtr—											
March	306	115	118	656	115	115	112	162	52,770	123	119
June	305	116	119	700	116	116	113	159	54,659	125	119
Sept.	307	116	120	733	117	117	112	161	60,572	125	119
Dec.	326	118	121	773	118	120	113	161	62,846	127	119

For footnotes *see* next page.

INDEX NUMBERS OF CONSUMER (RETAIL) PRICES IN VARIOUS COUNTRIES
ALL GROUPS INDEXES, 1960 TO 1968—*continued*

Period	*Japan (c)*	*Netherlands*	*New Zealand*	*Norway*	*Pakistan (Karachi)*	*Philippines (Manila)*	*Republic of South Africa (d)*	*Sweden*	*Switzerland*	*United Kingdom*	*United States of America (e)*
1960 .	83	94	94	90	97	88	96	91	91	91	97
1961 .	87	94	96	93	–98–	90	97	93	93	94	98
1962 .	93	96	98	98	99	95	99	97	97	–98–	99
1963 .	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
1964 .	104	–106–	104	106	104	108	103	103	103	103	–101–
1965 .	111	110	–107–	110	110	111	106	109	107	108	103
1966 .	116	116	110	114	118	118	110	116	–112–	113	106
1967 .	121	120	117	119	126	125	114	121	116	115	109
1968 .	128	125	122	123	126	125	116	123	119	121	114
1968—											
Qtr—											
March	126	123	119	121	125	124	115	122	119	118	112
June .	126	124	121	122	126	123	115	123	118	121	113
Sept. .	127	125	122	123	126	126	116	123	119	121	114
Dec. .	130	126	124	125	127	127	117	123	120	123	116

(*a*) Consumer Price Index converted to base 1963 = 100 by Commonwealth Statistician. (*b*) Prior to 1962, index for Paris—base: 1962 = 100. (*c*) Prior to 1964, 28 cities only. (*d*) Index for Europeans only. (*e*) Prior to 1964, excluding Alaska and Hawaii.

NOTE. Symbol – on each side of an index number (e.g. –95–) indicates that two series have been linked during that period. Symbol ——— between two index numbers indicates that it is not possible to link two series (because of change in scope, etc.) and therefore the index numbers are not comparable with each other even though they are shown on the same base period.

WHOLESALE PRICES AND PRICE INDEXES

Two indexes of wholesale prices of basic materials have been compiled by the Commonwealth Bureau of Census and Statistics. These are:

- (i) the Melbourne Wholesale Price Index;
- (ii) the Wholesale Price (Basic Materials and Foodstuffs) Index.

Work continues on the preparation of new series of wholesale price index numbers relating to materials used and articles produced by sectors of industry. The first of these new series will relate to materials used in the building industry and in manufacturing industry. (For details of new indexes published during 1969, *see* Appendix to this volume.) To a considerable extent, these first series will constitute a currently representative replacement for the present Basic Materials and Foodstuffs Wholesale Price Index. In the interim the existing index will continue to be compiled and published mainly to meet the needs of those who require it for special purposes. The groups of the existing index relate primarily to a commodity type classification and have never purported to represent the materials used or articles produced by defined sectors of industry.

A special purpose index 'Wholesale Price Index of Electrical Installation Materials' is also published by the Bureau (*see* page 254).

A brief note on the Melbourne Wholesale Price Index, which is now obsolete, is given on page 254. The Wholesale Price (Basic Materials and Foodstuffs) Index is compiled monthly and extends back to 1928.

Wholesale Price (Basic Materials and Foodstuffs) Index

Price quotations

The prices used in the index have, in the main, been obtained directly from manufacturers and merchants, and, with a few important exceptions, from Melbourne sources. Apart from locally-produced building materials and one or two minor commodities, however, the price movements may be taken as representative of variations in wholesale prices of the selected items in most Australian markets.

Commodities in the index are priced in their primary or basic form wherever possible and in respect of imported materials as nearly as may be at the point where they first make effective impact on the local price structure. Thus the prices of imported goods are not taken at the time of import but rather on an ex-bond (or into factory) basis. Broadly, where home-consumption prices exist for local products, they have been used in this index. During the year 1950–51 wool for local manufacture was subsidised, and the home-consumption price for wool was used to calculate the index numbers shown in the table on pages 253–4.

Commodities and grouping

For purposes of this index, 'basic' materials (as opposed to certain of the foodstuffs) are commodities in the primary or basic forms in which they first enter into productive processes carried out in Australia. The list of items is divided into seven main groups, each of which is sub-divided into goods which are mainly imported and goods which are mainly home-produced. The percentage of the total aggregate in 1967–68 contributed by each group was as follows: metals and coal, 15.62; oils, fats and waxes, 7.59; textiles, 2.64; chemicals, 4.15; rubber and hides, 1.15; building materials, 11.28; foodstuffs and tobacco, 57.57. Goods principally imported comprised 21.82 per cent of the total aggregate in 1967–68, and goods principally home-produced 78.18. A full list of the commodities and the quantity-multipliers (weights) is published in *Labour Report* No. 52, 1965 and 1966, page 39.

Method of construction

The index is calculated on the simple aggregative fixed-weights formula. The weights (quantity-multipliers) are based on estimates of the average annual consumption of the commodities in Australia during the period 1928–29 to 1934–35 inclusive. The validity of the weighting and the representativeness of the index have become increasingly affected by changes in usage and in industrial structure.

Index numbers

Index numbers for each group of commodities, and for all groups combined, for the index of wholesale prices of basic materials and foodstuffs are given in the following table. Current index numbers on the base: average of three years ended June 1939 = 100 are published monthly in the mimeographed statement *Wholesale Price (Basic Materials and Foodstuffs) Index* and in the *Monthly Review of Business Statistics*. A table showing index numbers computed to the base: 1928 = 100 is published in the *Labour Report*.

WHOLESALE PRICE (BASIC MATERIALS AND FOODSTUFFS) INDEX NUMBERS YEARS 1928–29 TO 1967–68 AND MONTHS 1968–69

(*Base of each index: average of* 3 *years ended June* 1939 = 100)

Period	*Basic materials*								*Basic materials and foodstuffs*		
	Metals and coal	*Oils, fats and waxes*	*Tex-tiles*	*Chemi-cals*	*Rubber and hides*	*Build-ing ma-terials*	*Total*	*Food-stuffs and to-bacco (a)*	*Goods princi-pally im-ported (b)*	*Goods princi-pally home pro-duced (a)*	*Total, all groups (a)*
1928–29 . . .	127	106	129	121	115	95	114	107	91	118	110
1929–30 . . .	126	111	99	116	87	94	107	110	94	118	111
1930–31 . . .	116	117	80	117	73	96	105	91	100	99	99
1931–32 . . .	108	113	77	119	74	95	101	86	100	92	95
1932–33 . . .	104	109	75	119	69	95	98	80	97	87	90
1933–34 . . .	103	84	102	111	80	94	92	84	89	89	90
1934–35 . . .	97	90	78	102	77	93	89	87	92	89	90
1935–36 . . .	92	95	100	99	88	93	90	92	95	92	93
1936–37 . . .	96	99	118	99	111	99	99	98	99	98	99
1937–38 . . .	101	101	100	100	97	104	102	102	102	101	101
1938–39 . . .	103	100	82	101	92	97	99	101	99	100	100
1939–40 . . .	105	115	104	107	116	108	109	99	111	101	104
1940–41 . . .	107	137	111	124	126	128	122	107	133	106	114
1941–42 . . .	117	151	118	137	135	135	133	116	153	112	124
1942–43 . . .	129	167	147	142	138	163	149	126	176	120	136
1943–44 . . .	131	170	150	143	140	174	153	130	182	122	140
1944–45 . . .	131	168	152	143	140	175	152	132	182	124	141
1945–46 . . .	130	156	152	142	140	177	149	136	178	127	142
1946–47 . . .	132	145	191	140	131	180	149	139	177	130	144
1947–48 . . .	146	161	283	148	126	190	166	154	192	145	159
1948–49 . . .	185	173	342	159	130	198	188	174	201	172	180
1949–50 . . .	214	184	434	187	143	225	214	196	223	196	204
1950–51 . . .	256	196	641	242	292	268	264	229	256	240	244
1951–52 . . .	343	220	577	314	298	370	321	276	288	300	297
1952–53 . . .	392	234	607	350	224	404	350	293	292	331	319

For footnotes *see* next page.

WHOLESALE PRICE (BASIC MATERIALS AND FOODSTUFFS) INDEX NUMBERS
YEARS 1928–29 TO 1967–68 AND MONTHS 1968–69—*continued*

(*Base of each index: average of* 3 *years ended June* 1939 = 100)

Period	*Basic materials*							*Food-stuffs and to-bacco (a)*	*Basic materials and foodstuffs*		
	Metals and coal	*Oils, fats and waxes*	*Tex-tiles*	*Chemi-cals*	*Rubber and hides*	*Build-ing ma-terials*	*Total*		*Goods princi-pally im-ported (b)*	*Goods princi-pally home pro-duced (a)*	*Total, all groups (a)*
1953–54	388	222	566	323	191	363	332	308	271	339	319
1954–55	391	214	510	314	246	372	330	315	277	340	322
1955–56	404	220	456	317	328	415	345	325	292	352	334
1956–57	409	241	520	344	302	463	367	324	311	357	344
1957–58	398	238	437	349	280	453	355	325	301	355	339
1958–59	392	231	362	327	293	423	340	332	283	358	336
1959–60	395	225	403	331	379	431	347	348	281	375	348
1960–61	399	222	387	331	341	439	346	372	278	394	360
1961–62	392	212	400	333	302	439	340	332	270	363	336
1962–63	388	209	432	317	262	439	336	342	272	368	340
1963–64	383	207	484	286	221	473	339	352	275	376	346
1964–65	391	207	427	286	242	503	345	364	277	388	355
1965–66	390	218	432	325	306	507	355	385	280	409	371
1966–67	396	220	419	381	281	511	362	401	283	425	383
1967–68	397	225	392	397	222	514	361	411	287	431	388
1968–69—											
July	394	225	395	402	236	524	364	425	289	442	397
August	395	225	396	390	234	525	363	412	289	432	390
September	397	222	402	390	238	528	364	407	291	428	387
October	400	222	415	390	244	532	367	401	291	424	385
November	p403	220	421	390	253	533	p368	396	292	p422	p383
December	p402	221	409	390	253	533	p367	396	292	p421	p383
January	p408	220	p409	390	262	534	p369	p397	291	p423	p384

(*a*) Excludes potatoes and onions from 1936–37. (*b*) Represents only such imported commodities as are included in the Wholesale Price Index and does not measure changes in the prices of all imports.

Melbourne Wholesale Price Index

An index of Melbourne wholesale prices was first compiled in 1912. It related chiefly to basic materials and foods weighted in accordance with consumption in the years immediately preceding that year. Neither the list of items nor the weighting was varied, except for some changes in the building materials group in 1949. The series has some historical significance as a measure of changes, since the year 1861, in the prices of its component items combined in the proportions in which they were in common use about the year 1910. A description of the index and a list of the commodities included in it were published in *Labour Report* No. 38, 1949, pages 43–5. Index numbers up to the year 1961, the last period for which the index was compiled, were published in Year Book No. 48, 1962.

Wholesale Price Index of Electrical Installation Materials

This special purpose index was introduced in 1964, and index numbers were published at quarterly intervals from August 1959 to February 1969, when monthly publication commenced. In addition to its use in connection with the Bureau's constant price estimates in the national accounting field, the index has a direct value as a measure of changes in aggregate cost of materials used in an important part of the building industry (other than house-building).

Commodities and grouping

The items in this index have been selected as representative of materials used in electrical installation in structures such as hospitals, schools, factories and multi-storeyed commercial buildings and flats. These items are divided into three main groups for which separate indexes are compiled in addition to the All Groups index. The combination of materials selected is fixed as to quantity and quality. A list of the components of the index is set out opposite with the percentage contribution of each to the All Groups index in the reference base year 1959–60.

Price quotations

The items are priced as at the middle of the month for which index numbers are published. The basis of pricing is the price to electrical contractors, delivered on site or into store, metropolitan area, Sydney and Melbourne. The price series used relate to specific standards for each item and in some cases are combinations of prices for different makes, types, etc. The units of quantity specified as the basis for collecting prices are representative lots normally purchased by electrical contractors, inclusive of quantity discounts and packing and quantity extras, etc.

Method of construction

The index is a fixed-weights index with the reference base: year 1959–60 = 100. In general, the weights were derived from information relating to the values of materials used in selected representative projects in Sydney and Melbourne during the three years 1960–61 to 1962–63. The projects selected for this purpose had a minimum electrical materials and labour content of $10,000. Selected representative items carry the weights of similar items not directly priced. The index is calculated by the method known as 'the weighted arithmetic mean of price relatives'. Each quarter, base period percentage value weights are applied to indexes of price movement relative to 1959–60.

WHOLESALE PRICE INDEX OF ELECTRICAL INSTALLATION MATERIALS
COMPOSITION AND WEIGHTING PATTERN AS AT REFERENCE BASE
YEAR 1959-1960

Component		*Percentage contribution to All groups index*		
1. CONDUCTORS GROUP				40.00
	Mains—			
	Insulated cables	14.79		
	Glands	0.70		
	Bare copper strand	0.50		
	Copper bus-bar	3.50		
			19.49	
	Circuits—			
	Insulated cables and wire	19.08		
	Bare copper strand	1.43		
			20.51	
2. CONDUIT AND ACCESSORIES GROUP				25.00
	Conduit and ducting—			
	Metal conduit	10.79		
	Metal and plastic ducting	9.46		
			20.25	
	Accessories—			
	Metal and plastic junction boxes	2.59		
	Metal and plastic accessories—other	2.16		
			4.75	
3. SWITCH-BOARD AND SWITCH-GEAR MATERIAL GROUP				35.00
	Bakelite accessories—			
	Mounting blocks	0.65		
	Switches	1.40		
	Terminal boxes	0.10		
			2.15	
	Fluorescent components and lamps—			
	Fluorescent tubes and starters	1.37		
	Incandescent lamps	0.58		
			1.95	
	Iron clad accessories—			
	Switch plug	1.67		
	Plug top	0.64		
	Other accessories	1.30		
			3.61	
	Switch-board accessories' components—			
	Mild steel	3.07		
	Aluminium bar	0.86		
	Contactors	4.90		
	Circuit breakers	11.00		
	Other accessories	7.46		
			27.29	
	Total			**100.00**

Index numbers

Index numbers for each group of items and for all groups combined for the index of wholesale prices of electrical installation materials are given in the following table. Current index numbers are published quarterly in the mimeographed statement *Wholesale Price Indexes—Price Index of Electrical Installation Materials.*

WHOLESALE PRICE INDEX OF ELECTRICAL INSTALLATION MATERIALS GROUP INDEX NUMBERS, YEARS 1959–60 TO 1967–68 AND MAY 1963 TO FEBRUARY 1969

(*Base of each index : year* 1959–60 = 100.0) (*a*)

Period	*Conductors*	*Conduit and accessories*	*Switch-board and switch-gear material*	*All groups*
Year—				
1959–60	**100.0**	**100.0**	**100.0**	**100.0**
1960–61	99.5	102.3	100.9	100.7
1961–62	98.7	102.8	99.8	100.1
1962–63	96.8	103.6	100.5	99.8
1963–64	93.2	103.7	100.8	98.5
1964–65	110.6	104.6	105.2	107.2
1965–66	105.8	104.2	106.6	105.7
1966–67	120.2	105.8	109.2	112.8
1967–68	119.9	106.0	112.5	113.8
1962–63—May	93.4	103.6	100.7	98.5
1963–64—August	93.3	103.4	100.8	98.5
November	93.3	103.8	100.8	98.6
February	93.5	103.8	100.8	98.7
May	92.6	103.8	100.9	98.3
1964–65—August	96.4	104.4	103.8	101.0
November	103.3	104.4	104.7	104.0
February	121.3	104.4	106.0	111.7
May	121.3	105.1	106.3	112.0
1965–66—August	104.2	105.3	106.3	105.2
November	104.3	104.1	106.3	105.0
February	108.3	103.7	106.9	106.6
May	106.5	103.8	106.9	106.0
1966–67—August	124.1	104.5	106.9	113.2
November	122.6	106.2	109.8	114.0
February	122.6	106.3	110.1	114.2
May	111.3	106.3	110.0	109.6
1967–68—August	111.5	106.3	110.3	109.8
November	123.1	105.3	112.4	114.9
February	127.7	105.7	113.0	117.0
May	117.1	106.7	114.2	113.5
1968–69—August	112.2	106.5	113.8	111.3
November	113.9	106.8	115.6	112.7
February	124.8	106.8	115.7	117.1

(*a*) Figures are shown to one decimal place to avoid distortions that would occur in rounding off the index numbers to the nearest whole number.

EXPORT PRICES AND PRICE INDEXES

Previous export price indexes

1901 to 1917

An annual index of export prices has been published by the Bureau since its inception. The first index was compiled annually for the years 1901 to 1916–17. The method of computation was to select all articles of export which were recorded by units of quantity, and to apply to the quantities of these export commodities actually exported during any year the average price per unit ruling in the year 1901 (adopted as the base year). The 'total value' so obtained was divided into the total recorded value of these exports for the year concerned and the result (multiplied by 1,000) was the export price index number for that year.

1918 to 1930

The method was changed in 1918. Weights for all principal exports were calculated, based on the average quantities of exports for the nineteen and a half years from 1 January 1897 to 30 June 1916. To these weights were applied the 'average unit export values' of each export in successive years, and a weighted aggregative index of 'price' variations was derived. This index was published for the years 1897 to 1929–30. Particulars of this index were last published in Year Book No. 24, page 147.

1928 to 1962

After the 1914–18 War the relative importance of different exports changed considerably, and the pattern of exports varied considerably from year to year. For these reasons two new series of monthly export price indexes—one using fixed weights and the other using changing weights—were published in 1937, compiled back to 1928. The data on which both series were based differed from those used in the previous series of annual index numbers. The most important change was the use of actual (or calculated) export prices in place of the 'unit values' declared at the Customs. Brief notes on these two indexes are given below. A full description of both indexes was last published in Year Book No. 48, 1962, pages 500–4.

The Fixed Weights Index. This was a weighted aggregative index of price variations. It was compiled back to 1928, with that year taken as base. In later years it was published on the base: average of three years ended June 1939 = 100. The original weights (used for the period 1928 to 1936) were the average annual exports (production in the case of gold) during the five years 1928–29 to 1932–33. From July 1936 the weights were revised and were based on average annual exports (production in the case of gold) during the three years 1933–34 to 1935–36. This index was published from 1937 until July 1962, after which it was replaced by the current Export Price Index described below.

The Changing Weights Index. This index was designed for shorter period comparisons—from one or more months of the current year to the corresponding months of the previous year. In computing these index numbers the 'quantity multipliers' were the quantities actually exported (sold, in some cases) in the months (or periods) to which the index numbers related. This index was discontinued in 1962.

The current Export Price Index

The current Export Price Index was first published in October 1962, but index numbers were compiled back to July 1959. The reference base of this index is: year 1959–60 = 100. This index is a fixed-weights index, and its purpose (as was that of the previous fixed-weights index) is to provide comparisons monthly, over a limited number of years, of the level of export prices of the selected items, making no allowance for variations in quantities exported. The index numbers are thus measures of price change only. The price series used in the index relate to specified standards for each commodity and in most cases are combinations of prices for a number of representative grades, types, etc. For some commodities price movements in the predominant market, or markets, are used, while for other commodities average realisations in all export markets are used. As nearly as possible, prices used are on the basis f.o.b. at the main Australian ports of export. The index is calculated by the method known as 'the weighted arithmetic mean of price relatives'.

Composition and weighting

There are twenty-nine items in the current index compared with twenty items in the previous index. The weights for the current index are based on average annual values of exports during the five years 1956–57 to 1960–61. During that period the twenty-nine items in the index constituted 83 per cent of the total value of Australian exports. In recent years this proportion has decreased and in 1966–67 and 1967–68 was less than 75 per cent of the total value. A review of the content and weighting pattern of the index is proceeding.

The following table sets out a list of the items, and groups of items, in the index, together with the percentage contribution of each item and group to the All Groups index in the reference base year 1959–60. The weights used for some of the items are adjusted to cover some related commodities which are not priced directly. The most important instances of this are wool, which includes wool exported on sheepskins, and copper, zinc, lead and silver, which include the estimated metallic content of ores and concentrates exported. In the previous index the weight for gold was derived from production instead of export figures. For the period 1956–57 to 1960–61 production and exports of gold were similar, and therefore in the current index the weight for gold (as for the other items) is based on average annual exports during the period.

EXPORT PRICE INDEX

LIST OF ITEMS AND PERCENTAGE CONTRIBUTION OF ITEMS AND GROUPS TO ALL GROUPS INDEX IN 1959–60

Group and item	*Percentage contribution to All groups index in 1959–60*
Wool	*50.73*
Meats—	
Beef	6.71
Lamb	0.76
Mutton	0.59
Canned—Beef	1.65
Mutton	0.21
Total, meats	*9.92*
Dairy produce—	
Processed milk	1.36
Butter	4.02
Cheese	0.64
Eggs	0.47
Total, dairy produce	*6.49*
Cereals—	
Wheat and flour	10.11
Barley	1.77
Oats	0.66
Total, cereals	*12.54*
Dried and canned fruits—	
Dried—Sultanas	1.06
Currants	0.12
Canned—Pineapples	0.20
Apricots	0.11
Peaches	0.37
Pears	0.68
Total, dried and canned fruits	*2.54*
Sugar	*3.99*
Hides and tallow—	
Cattle hides	0.72
Tallow	0.54
Total, hides and tallow	*1.26*
Metals and coal—	
Coal	0.63
Iron and steel	3.46
Copper	1.57
Zinc	1.23
Lead	2.97
Silver	0.66
Total, metals and coal	*10.54*
Gold	*1.99*
Total	**100.00**

Index numbers

Index numbers for each of the groups and 'All groups' are shown in the table on page 259. The yearly index numbers are simple averages of the twelve monthly index numbers in each year.

Link between current and previous indexes

In order to show approximate movements in export prices over a long period, the 'All groups' indexes of the previous and current series have been linked together at the year 1959–60, the earliest year for which the new index has been compiled. The table on page 260 shows this linked series and a long-term price index for wool, which is the most important single component in the movement of the 'All groups' index.

EXPORT PRICE INDEX NUMBERS
YEARS 1959–60 TO 1967–68 AND MONTHS JULY 1965 TO FEBRUARY 1969

(*Base of each index: year* 1959–60 = 100)

Period	*Wool*	*Meats*	*Dairy produce*	*Cereals*	*Dried and canned fruits*	*Sugar*	*Hides and tallow*	*Metals and coal*	*Gold*	*All groups*
1959–60	100	100	100	100	100	100	100	100	100	100
1960–61	92	104	82	99	99	101	92	97	100	95
1961–62	97	100	81	106	95	91	84	91	100	96
1962–63	104	101	88	107	90	107	72	89	100	101
1963–64	120	105	93	107	98	175	73	101	100	114
1964–65	102	110	94	107	100	100	91	123	101	105
1965–66	107	120	86	107	102	84	107	122	101	107
1966–67	103	124	84	114	101	67	89	117	101	105
1967–68	95	125	79	109	95	67	67	120	104	100
1965–66—										
July	98	114	90	104	102	101	100	117	101	102
August	98	115	89	104	102	107	102	117	101	102
September	99	116	89	105	101	100	101	118	101	103
October	105	114	88	106	102	93	99	120	100	106
November	108	116	88	106	101	85	100	120	100	107
December	108	117	87	107	102	82	100	125	100	108
January	108	118	85	109	102	75	109	125	100	108
February	108	121	84	109	102	81	121	129	100	109
March	111	126	84	107	101	73	122	126	100	110
April	113	130	84	110	101	72	119	129	101	112
May	113	130	84	110	101	70	111	119	101	111
June	113	127	84	111	101	69	105	124	101	111
1966–67—										
July	113	121	84	113	102	69	105	122	101	110
August	111	117	84	113	102	100	105	122	101	110
September	107	120	84	115	102	86	96	117	101	107
October	102	120	84	113	102	73	88	116	101	104
November	102	119	84	112	102	63	88	116	101	104
December	102	121	84	114	102	64	92	116	101	104
January	100	127	84	114	100	55	92	114	101	103
February	102	129	84	114	100	62	86	115	101	105
March	100	128	84	113	100	60	85	116	101	103
April	100	128	85	113	100	56	80	115	101	103
May	102	128	85	115	100	57	77	113	101	104
June	100	126	85	115	100	59	76	116	101	103
1967–68—										
July	98	127	85	113	99	59	72	116	101	102
August	92	127	85	112	99	61	70	117	101	99
September	92	126	85	111	99	73	69	117	101	99
October	92	128	85	112	98	122	68	117	101	101
November	92	127	82	108	99	72	65	116	101	98
December	94	121	75	106	98	63	65	123	101	99
January	94	126	75	105	97	58	65	119	101	98
February	98	124	75	106	90	60	66	122	101	101
March	98	121	75	109	90	62	66	125	100	101
April	98	121	74	107	91	61	65	125	105	101
May	98	122	73	108	91	56	64	119	111	100
June	98	126	73	109	92	62	65	120	119	101
1968–69—										
July	96	127	73	107	p95	81	64	120	119	p101
August	96	128	73	107	p95	86	65	118	107	p101
September	98	128	73	107	p95	95	66	120	111	p102
October	102	134	73	106	p95	66	66	120	114	p104
November	104	130	72	107	p95	53	68	119	112	p104
December	100	p127	72	105	p95	54	70	121	112	p102
January	p100	p127	72	103	p97	p69	71	121	116	p102
February	p100	p129	72	103	p97	p65	74	123	121	p102

EXPORT PRICE INDEX NUMBERS—LINKED SERIES 1936-37 TO 1967-68

(Base of each index: year 1959–60 = 100)

Period	*Wool*	*All groups*
1936–37	29	30
1937–38	23	27
1938–39	19	22
1939–40	23	26
1940–41	24	28
1941–42	24	28
1942–43	28	30
1943–44	28	31
1944–45	28	34
1945–46	28	39
1946–47	41	54
1947–48	68	75
1948–49	86	88
1949–50	111	101
1950–51	235	173
1951–52	133	125
1952–53	145	128
1953–54	145	125
1954–55	127	114
1955–56	109	105
1956–57	136	117
1957–58	111	102
1958–59	85	90
1959–60	**100**	**100**
1960–61	92	95
1961–62	97	96
1962–63	104	101
1963–64	120	114
1964–65	102	105
1965–66	107	107
1966–67	103	105
1967–68	95	100

WAGES, EARNINGS AND HOURS

Arbitration and Wages Boards Acts and associated legislation

Particulars regarding the operation of Commonwealth and State Laws for the regulation of wages, hours and other conditions of employment were first compiled for the year 1913, and revised particulars have appeared annually in the *Labour Report*. A summary of the Commonwealth legislation and brief particulars of Commonwealth and State industrial tribunals are given in the following paragraphs.

Commonwealth industrial legislation and tribunals

Under placitum (xxxv) of section 51 of the Commonwealth of Australia Constitution, the Commonwealth Parliament is empowered to make laws with respect to 'conciliation and arbitration for the prevention and settlement of industrial disputes extending beyond the limits of any one State'. The Parliament has made such a law, namely the *Conciliation and Arbitration Act* 1904–1968.

This Act defines an 'industrial dispute' as:

> '(*a*) A dispute (including a threatened, impending or probable dispute) as to industrial matters which extends beyond the limits of any State; and (*b*) a situation which is likely to give rise to a dispute as to industrial matters which so extends; and includes—(*c*) such a dispute in relation to employment in an industry carried on by, or under the control of, a State or an authority of a State; (*d*) a dispute in relation to employment in an industry carried on by, or under the control of, the Commonwealth or an authority of the Commonwealth, whether or not the dispute extends beyond the limits of any one State; and (*e*) a claim which an organization is entitled to submit to the Commission under section eleven A of the *Public Service Arbitration Act* 1920–1968 or an application or matter which the Public Service Arbitrator has refrained from hearing, or from further hearing, or from determining under section fourteen A of that Act, whether or not there exists in relation to the claim, application or matter a dispute as to industrial matters which extends beyond the limits of any one State.'

The Conciliation and Arbitration Act was extensively amended by an Act (No. 44 of 1956) assented to on 30 June 1956. This amendment altered the structure of the arbitration machinery by separating the judicial functions from the conciliation and arbitration functions. The Commonwealth Industrial Court was established to deal with judicial matters under the Act, and the Commonwealth Conciliation and Arbitration Commission to handle the functions of conciliation and arbitration. A summary of the provisions of the *Conciliation and Arbitration Act* 1904–1968 is given in the following paragraphs.

The Commonwealth Industrial Court is at present composed of a Chief Judge and four other Judges. The jurisdiction of the Court shall be exercised by not less than two Judges, except in the following circumstances. A single Judge may exercise the jurisdiction of the Court with respect to the dismissal or injury of an employee on account of industrial action, interpretation of awards, questions concerning eligibility of membership of an organisation, disputes between an organisation and its members, and a prescribed matter of practice or procedure. A single Judge may refer a question of law for the opinion of the Court constituted by not less than two Judges. The Court is a Superior Court of Record with the same power to punish contempts of its power and authority as is possessed by the High Court. In general, decisions of the Industrial Court are final; however, an appeal lies to the High Court, but only when the latter grants leave to appeal. The Act provides for the registration of associations of employees and employers, and for inquiries to be held concerning disputed elections in organisations; and certain powers in connection therewith are, by the Act, given to the Industrial Court. Provision is also made for the Commission to exercise the powers of the Court with regard to an application for cancellation of registration of an organisation. Any such change of jurisdiction must be notified by proclamation. This provision could be used if the powers of the Court in this regard were declared, in whole or in part, to be invalid.

Special provision is made concerning the right of audience before the Commonwealth Industrial Court. Briefly, except in proceedings which, in general, involve questions of law or offences against the Act, parties are able to elect whether to appear personally or to be represented by lawyers or officials. Even in proceedings involving questions of law, except appeals from decisions by other Courts to the Industrial Court, on matters arising under this Act or the *Public Service Arbitration Act* 1920–1968, the parties may, if they wish and the Court grants leave, be represented by officials.

The Commonwealth Conciliation and Arbitration Commission at the end of 1968 was composed of a President, seven Deputy Presidents, a Senior Commissioner, thirteen Commissioners and three Conciliators. The Commission is empowered to prevent or settle industrial disputes by conciliation or arbitration, and to make suggestions and to do such things as appear right and proper for (*a*) effecting a reconciliation between parties to industrial disputes; (*b*) preventing and settling industrial disputes by amicable agreement; and (*c*) preventing and settling, by conciliation or arbitration, industrial disputes not prevented or settled by amicable agreement. The Commission may exercise its powers of its own motion or on the application of a party.

The President may assign a Commissioner to deal with industrial disputes relating to particular industries, or members of the Commission to deal with a particular industrial dispute. However, subject to the approval of the President, it is the duty of the Senior Commissioner to organise and allocate the work of the Commissioners and Conciliators. When an industrial dispute occurs or is likely to occur, a Commissioner shall take steps for the prompt prevention or settlement of that dispute by conciliation or, if in his opinion conciliation in unlikely to succeed or has failed, by arbitration. A Commissioner may arrange with the Senior Commissioner for a Conciliator to assist the parties to reach an amicable agreement and shall do so if the parties so request. If an agreement is reached, a memorandum of its terms shall be made in writing, and may be certified by the Commission. A certified memorandum shall have the same effect as an award.

Only the Commission in Presidential Session, that is, the Commission constituted by at least three presidential members nominated by the President, has the power to make awards, or to certify agreements, concerning standard hours, basic wages and long-service leave. Upon application by a party to an industrial dispute, a Commissioner shall consult with the President as to whether in the public interest any matter in dispute should be dealt with by a Commission constituted by not less than three members nominated by the President, at least one of whom shall be a presidential member and one, where practicable, the Commissioner concerned. The President may direct the Commission to hear the matter in dispute; however, after consideration, the Commission may refer the matter in dispute back for determination to the Commissioner originally dealing with the dispute.

An appeal against the decision of a Commissioner shall be heard by not less than three members nominated by the President, of whom at least two shall be presidential members of the Commission. However, an appeal will not be heard unless the Commission considers it is necessary as a matter of public interest. The President, after taking account of the views of the parties to a dispute, may appoint a member of the Commission to take evidence on behalf of a presidential bench of the Commission, so that it may have this evidence before it when it commences its hearing.

Full benches of the Commission not constituted by the same persons may sit in joint session at the direction of the President when he considers it desirable and has the opinion that a question is common to the matters before those benches. A joint session may be held whether the benches concerned are constituted pursuant to the Conciliation and Arbitration Act or the Public Service Arbitration Act, and whether they are constituted to hear references or appeals. However, it is left to each appropriate full bench to determine any of the matters before it.

Provision is also made in the Act for a presidential member of the Commission to handle industrial matters in connection with the maritime industries, the Snowy Mountains Area and the stevedoring industry, except in those matters for which the Act requires that the Commission shall be constituted by more than one member. The Commonwealth Conciliation and Arbitration Commission also deals with disputes and industrial matters, interstate or intra-state, associated with undertakings or projects of the Commonwealth Government which have been declared by the Minister to be Commonwealth projects for the purposes of this Act. In effect, this places employees of Commonwealth projects, so declared, under the jurisdiction of the Commission. The Minister has the power to exempt certain persons or classes of persons working on these projects from the jurisdiction of the Commission.

The Commission may make an award in relation to an industrial dispute concerning employees of a Commonwealth project or when the Public Service Arbitrator refrains from dealing with claims made by a Public Service employee organisation or consents to the claims being presented to the Commission, though such an award may be inconsistent with a law of the Commonwealth relating to salaries, wages, rates of pay or terms or conditions of service of employees in the Public Service as defined by section three of the *Public Service Arbitration Act* 1920–1968, not being the *Commonwealth Employees' Compensation Act* 1930–1968, the *Commonwealth Employees' Furlough Act* 1943–1968, the *Superannuation Act* 1922–1968 or any other prescribed Act.

An amendment of the Conciliation and Arbitration Act operative from November 1967 provided for the appointment of a person to be the Flight Crew Officers Industrial Tribunal empowered to prevent or settle industrial disputes relating to pilots, navigators, or flight engineers of aircraft.

The Conciliation and Arbitration Act provides that where a State law, or an order, award, decision or determination of a State industrial authority is inconsistent with or deals with a matter dealt with in an award of the Commission, the latter shall prevail, and the former, to the extent of the inconsistency or in relation to the matter dealt with, shall be invalid.

For further particulars regarding Commonwealth arbitration legislation, *see* the annual *Labour Report*. For information concerning the Australian Stevedoring Industry Authority and the Coal Industry Tribunal *see* the Transport and Communication chapter and the Mineral Industry chapter respectively of this Year Book, and for further information on the Commonwealth Public Service Arbitrator *see* the *Labour Report*.

State industrial tribunals

New South Wales

The controlling authority is the Industrial Commission of New South Wales, consisting of a President and seven other Judges. Subsidiary tribunals are the Conciliation Commissioners, the Apprenticeship Commissioner, Conciliation Committees, and Apprenticeship Councils constituted for particular industries. Each Conciliation Committee consists of a Conciliation Commissioner as Chairman and equal numbers of representatives of employers and employees. The Apprenticeship Commissioner and the members of the Conciliation Committee for an industry constitute the Apprenticeship Council for the industry. These subsidiary tribunals may make awards binding on industries, but an appeal to the Industrial Commission may be made against any award. Special Commissioners with conciliatory powers and limited arbitration powers may be appointed. Compulsory control commenced in 1901, after the earlier Acts of 1892 and 1899 providing for voluntary submission of matters in dispute had proved abortive.

Victoria

The authorities are separate Wages Boards for the occupations and industries covered, each consisting of a chairman and equal numbers of representatives of employers and employees, and a Court of Industrial Appeals, the latter presided over by a Judge of the County Court. The system was instituted in the State in 1896, and represented the first example in Australia of legal regulation of wage rates.

Queensland

Legal control was first instituted in 1908 with the passing of the Wages Boards Act. '*The Industrial Conciliation and Arbitration Act of* 1961' established the Industrial Conciliation and Arbitration Commission and preserved and continued in existence the Industrial Court. The Industrial Court is constituted by the President (a Judge of the Supreme Court of Queensland) sitting alone, and the Full Industrial Court by the President and two Commissioners. The Conciliation and Arbitration Commission is constituted by a Commissioner sitting alone; and the Full Bench of the Commission by at least three Commissioners. Not more than five Commissioners shall be appointed. A Commissioner shall not be capable of being a member of the Executive Council or of the Legislative Assembly, and shall not take part in the management of any business.

South Australia

In South Australia from July 1966 the system of control consists of an Industrial Commission, an Industrial Court and Conciliation Committees. The Industrial Commission is composed of a President and two Commissioners and has power to make awards. The President of the Commission is also Judge of the Industrial Court which deals with legal matters. The two Commissioners are chairmen of each of the Conciliation Committees consisting of an equal number of representatives of employers and employees. These committees issue awards. Where complete agreement cannot be reached in these committees the chairman sits as a Commissioner to determine the unresolved matters. Provision is made for references and appeals to the full Commission.

Western Australia

Legal control dates back to 1900. The present system of control comprises a four-man Western Australian Industrial Commission and an Industrial Appeal Court consisting of three Supreme Court Judges who are nominated by the Chief Justice of Western Australia. A Commissioner may, in relation to any dispute or other matter, refer such matters to the Commission in Court Session. Similarly, appeals from decisions of a single Commissioner are heard by the other three Commissioners acting as the Commission in Court Session, but such hearings are restricted to the evidence and matters raised in the proceedings before the single Commissioner. Up to December 1966 the Commission in Court Session fixed and adjusted the basic wage. In December 1966 legislation provided that the Western Australian basic wage rates should be the same as the Commonwealth Six Capitals rates as soon as these exceeded the State rates. However Commonwealth basic wages were eliminated from Commonwealth awards in July 1967. Western Australian Legislation operative from 22 November 1968 fixed the State basic wages for adult males and adult females and provided for the Commission to review the basic wage at least every twelve months (for further details *see* page 288). Appeals from the Commission to the Industrial Appeal Court are limited to matters which are erroneous in law or in excess of jurisdiction. The Court has the power to impose penalties for disobedience of orders made by the Commission.

The Western Australian Coal Industry Tribunal, established under the *Mining Act, 1904–1968*, has power to determine any industrial matter in the coal mining industry. It consists of a chairman and four other members (two representatives each of employers and employees). Boards of reference may be appointed by the Tribunal, and decisions of the Tribunal may be reviewed by the Court of Arbitration on the application of a party subject to the decision.

Tasmania

The authority consists of Wages Boards for separate industries, comprising a Chairman (who is common to all Wages Boards) appointed by the Governor, and equal numbers of representatives of employers and employees appointed by the Minister administering the Act. The system was instituted in 1910.

Incidence of industrial awards, determinations and collective agreements

In May 1968 a survey ascertained the approximate proportions of employees whose wages, salaries and conditions of work were normally varied in accordance with variations in awards, determinations and registered collective agreements of Commonwealth and State industrial authorities. The scope, results, etc. of this survey were published in a statistical bulletin *Survey of the Incidence of Industrial Awards, Determinations and Collective Agreements*, May 1968, dated 19 June 1969.

Rates of wage and hours of work

This section contains indexes (with base: year 1954 = 100) of minimum weekly and hourly rates of wage and standard hours of work for adult males and adult females for Australia and each State. In the indexes there are fifteen industry groups for adult males and eight industry groups for adult females. For relevant periods these indexes replace cognate indexes (base: year 1911 = 1,000 for males and April 1914 = 1,000 for females) published in Year Books before No. 46, 1960. The current indexes are based on the occupation structure existing in 1954. Weights for each industry and each occupation were derived from two sample surveys made in that year. The first was the Survey of Awards in April 1954 which showed the number of employees covered by individual awards, determinations and agreements. This provided employee weights for each industry as well as a basis for the Survey of Award Occupations made in November 1954. This second survey showed the number of employees in each occupation within selected awards, etc. thereby providing occupation weights.

The industrial classification used in the current indexes, shown in the table on page 265, does not differ basically from the previous classification, the alterations being largely in the arrangement of classes. The former Pastoral, agricultural, etc. group and the domestic part of the Amusement, hotels, personal service, etc. group are excluded from the current indexes because of coverage difficulties.

The minimum wage rates and standard hours of work used in the current indexes are for representative occupations within each industry. They have been derived entirely from representative awards, determinations and agreements in force at the end of each month or quarter, commencing with March 1939 for adult males and March 1951 for adult females. Particulars have been available as at the end of each month for adult males from January 1957 and for adult females from July 1967. The index for adult males includes rates and hours for 3,415 award designations. However, as some of these designations are operative within more than one industry, or in more than one State, the total number of individual award occupations is 2,313. For adult females the corresponding numbers are 1,100 and 515. Using the industry and occupation weights derived from the surveys described above, these rates and hours were combined to give weighted averages for each industry group for each State and Australia.

Because the indexes are designed to measure movements in prescribed minimum rates of 'wages' as distinct from 'salaries', those awards, etc. which relate solely or mainly to salary earners are excluded.

A more detailed description of the current indexes of minimum rates of wage and standard hours of work is given in the *Labour Report*, which also contains an extensive tabular presentation of the minimum rates of wage for adult males and females in the principal occupations in the capital city of each State. Further particulars of wage rates and index numbers will be found in a mimeographed statement *Minimum Wage Rates, March* 1939 *to June* 1965. Current figures are published in the monthly bulletin *Wage Rates and Earnings.*

Weekly wage rates—adult males

The following table shows, for each State and Australia, the weighted average minimum weekly rates of wage payable to adult male workers for a full week's work and index numbers at the dates specified.

WEEKLY WAGE RATES: ADULT MALES, ALL GROUPS(*a*), STATES DECEMBER 1950 TO 1968

WEIGHTED AVERAGE MINIMUM WEEKLY RATES(*b*) PAYABLE FOR A FULL WEEK'S WORK (EXCLUDING OVERTIME) AND INDEX NUMBERS OF WAGE RATES

End of December—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
			RATES OF WAGES(*c*) ($)				
1950 . . .	20.62	20.18	19.52	19.79	20.06	19.80	20.20
1960 . . .	36.28	34.99	35.07	34.22	35.81	35.15	35.50
1966 . . .	43.27	42.78	43.56	41.75	43.38	43.27	43.05
1967 . . .	45.24	44.59	45.55	43.78	45.08	45.31	44.96
1968 . . .	49.19	48.71	48.86	47.94	47.59	48.91	48.78
			INDEX NUMBERS (*Base: Weighted Average Weekly Wage Rate for Australia,* 1954 = 100)				
1950 . . .	73.0	71.4	69.1	70.1	71.0	70.1	71.5
1960 . . .	128.5	123.9	124.2	121.2	126.8	124.5	125.7
1966 . . .	153.2	151.5	154.2	147.8	153.6	153.2	152.4
1967 . . .	160.2	157.9	161.3	155.0	159.6	160.4	159.2
1968 . . .	174.2	172.5	173.0	169.8	168.5	173.2	172.7

(*a*) Excludes rural. (*b*) As prescribed in awards, determinations and agreements. (*c*) The amounts shown should not be regarded as actual current averages, but as an index expressed in money terms, indicative of trends.

The following table shows for Australia the weighted average minimum weekly rates of wage and index numbers in each industry group and for all groups (excluding rural) at the dates specified.

WEEKLY WAGE RATES: ADULT MALES, INDUSTRY GROUPS, AUSTRALIA DECEMBER 1950 TO 1968

WEIGHTED AVERAGE MINIMUM WEEKLY RATES(a) PAYABLE FOR A FULL WEEK'S WORK (EXCLUDING OVERTIME) AND INDEX NUMBERS OF WAGE RATES

RATES OF WAGE(b)

($)

Industry group	*End of December—*				
	1950	*1960*	*1966*	*1967*	*1968*
Mining and quarrying	25.96	41.47	50.34	52.26	56.79
Manufacturing—					
Engineering, metals, vehicles, etc.	20.17	35.02	41.89	43.72	48.58
Textiles, clothing and footwear	19.74	34.04	40.66	42.40	45.14
Food, drink and tobacco	20.14	35.22	42.56	44.39	47.17
Sawmilling, furniture, etc.	19.60	34.62	41.64	43.35	46.60
Paper, printing, etc.	21.42	37.92	45.76	47.84	52.76
Other manufacturing	19.76	34.72	41.98	43.90	47.58
All manufacturing groups	*20.08*	*35.05*	*42.11*	*43.95*	*48.02*
Building and construction	19.86	35.75	44.44	46.16	50.39
Railway services	19.58	34.65	41.84	43.50	46.42
Road and air transport	19.79	35.25	42.97	45.16	47.90
Shipping and stevedoring(c)	19.66	34.46	41.90	43.87	46.95
Communication	21.33	38.49	49.69	52.69	58.77
Wholesale and retail trade	20.08	35.71	42.86	44.79	47.96
Public authority (n.e.i.) and community and business services	19.21	34.81	42.68	45.53	47.86
Amusement, hotels, personal service, etc.	19.23	33.73	40.54	42.32	44.62
All industry groups(d)	**20.20**	**35.50**	**43.05**	**44.96**	**48.78**

INDEX NUMBERS

(Base: Weighted Average Weekly Wage Rate for Australia, 1954 = 100)

Industry group	*1950*	*1960*	*1966*	*1967*	*1968*
Mining and quarrying	91.9	146.8	178.2	185.0	201.1
Manufacturing—					
Engineering, metals, vehicles, etc.	71.4	124.0	148.3	154.8	172.0
Textiles, clothing and footwear	69.9	120.5	144.0	150.1	159.8
Food, drink and tobacco	71.3	124.7	150.7	157.2	167.0
Sawmilling, furniture, etc.	69.4	122.6	147.4	153.5	165.0
Paper, printing, etc.	75.9	134.3	162.0	169.4	186.8
Other manufacturing	70.0	122.9	148.6	155.4	168.5
All manufacturing groups	*71.1*	*124.1*	*149.1*	*155.6*	*170.0*
Building and construction	70.3	126.6	157.3	163.4	178.4
Railway services	69.3	122.7	148.2	154.0	164.4
Road and air transport	70.1	124.8	152.2	159.9	169.6
Shipping and stevedoring(c)	69.6	122.0	148.4	155.3	166.2
Communication	75.5	136.3	176.0	186.6	208.1
Wholesale and retail trade	71.1	126.4	151.8	158.6	169.8
Public authority (n.e.i.) and community and business services	68.0	123.2	151.1	161.2	169.5
Amusement, hotels, personal service, etc.	68.1	119.4	143.5	149.8	158.0
All industry groups(d)	**71.5**	**125.7**	**152.4**	**159.2**	**172.7**

(a) As prescribed in awards, determinations and agreements. (b) The amounts shown should not be regarded as actual current averages, but as an index expressed in money terms, indicative of trends. (c) Includes the value of keep, where supplied. (d) Excludes rural.

Adult males—components of total wage rate. A dissection of weighted average minimum weekly wage rates for adult males into three components of the total wage, i.e. basic wage, margin, and loading, with separate particulars for employees covered by awards etc. within Commonwealth and State jurisdictions, has been calculated for months to June 1967. Compilation of averages of components for months subsequent to June 1967 was not possible because of the decision of the Commonwealth Conciliation and Arbitration Commission to eliminate basic wages and margins from its awards (*see* page 284). For figures of components to December 1966 *see* previous issues of this Year Book. A detailed description of this dissection of weekly wage rates into components, and tables for each State and Australia according to jurisdiction, extending back to 1939, have been published in the mimeographed statement *Minimum Wage Rates, March 1939 to June 1965* and in the June 1968 issue of the *Wage Rates and Earnings* bulletin.

Adult males—jurisdiction. Weighted average minimum weekly wage rates for adult males covered by *Commonwealth awards etc.* and for those covered by *State awards etc.* (as defined below) are shown separately in the following table. The averages shown in these tables were previously published in the relevant parts of the tables of components of wage rates which have been discontinued (*see* above). For the purposes of the index, *Commonwealth awards etc.* include awards of, or agreements registered with, the Commonwealth Conciliation and Arbitration Commission, and determinations of the Commonwealth Public Service Arbitrator. *State awards etc.* include awards or determinations of, or agreements registered with, State industrial tribunals, together with certain unregistered agreements when these are dominant in the particular industries to which they refer.

WEEKLY WAGE RATES(a): ALL GROUPS—ADULT MALES

($)

WEIGHTED AVERAGE MINIMUM WEEKLY RATES PAYABLE FOR A FULL WEEK'S WORK (EXCLUDING OVERTIME) AS PRESCRIBED IN AWARDS, DETERMINATIONS AND AGREEMENTS

	Jurisdiction		
	Commonwealth awards etc.	*State awards etc.*	*All awards etc.*
AUSTRALIA, DECEMBER 1950 TO 1968			
December—			
1950	20.18	20.23	20.20
1960	35.14	35.88	35.50
1966	42.77	43.35	43.05
1967	44.69	45.24	44.96
1968	49.14	48.39	48.78
STATES, DECEMBER 1968			
New South Wales	49.69	48.62	49.19
Victoria	48.47	49.25	48.71
Queensland	50.02	48.55	48.86
South Australia	48.84	45.91	47.94
Western Australia	51.97	47.01	47.59
Tasmania	48.37	49.73	48.91

(a) Excludes rural. The amounts should not be regarded as actual current averages, but as an index expressed in money terms, indicative of trends. For definitions *see* text above.

Weekly wage rates—adult females

The following table shows, for each State and Australia, the weighted average minimum weekly rates of wage payable to adult female workers for a full week's work and index numbers at the dates specified. This series has not been compiled for years prior to 1951.

WEEKLY WAGE RATES: ADULT FEMALES, STATES, DECEMBER 1951 TO 1968

WEIGHTED AVERAGE MINIMUM WEEKLY RATES(a) PAYABLE FOR A FULL WEEK'S WORK (EXCLUDING OVERTIME) AND INDEX NUMBERS OF WAGE RATES

End of December—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
			RATES OF WAGE(b) ($)				
1951 . . .	17.23	17.22	16.12	17.02	16.25	16.56	17.03
1960 . . .	26.12	24.66	23.93	24.29	25.12	23.88	25.17
1966 . . .	31.52	30.06	30.53	29.42	30.72	29.80	30.70
1967 . . .	33.29	32.04	32.71	31.30	32.01	31.62	32.57
1968 . . .	35.52	34.51	34.70	33.57	34.12	33.41	34.84
			INDEX NUMBERS (*Base: Weighted Average Weekly Wage* ***Rate for*** *Australia*, 1954 = 100)				
1951 . . .	86.6	86.5	81.0	85.5	81.6	83.2	85.6
1960 . . .	131.2	123.9	120.2	122.0	126.2	120.0	126.4
1966 . . .	158.3	151.0	153.4	147.8	154.3	149.7	154.2
1967 . . .	167.2	160.9	164.3	157.2	160.8	158.8	163.6
1968 . . .	178.4	173.3	174.3	168.6	171.4	167.8	175.0

(a) As prescribed in awards, determinations and agreements. (b) The amounts shown should not be regarded as actual current averages, but as an index expressed in money terms, indicative of trends.

The following table shows for Australia weighted average minimum weekly rates of wage and index numbers in each of the industry groups in which the number of females employed is important, and the weighted average for all groups combined, at the dates specified.

WEEKLY WAGE RATES: ADULT FEMALES, INDUSTRY GROUPS, AUSTRALIA DECEMBER 1951 TO 1968

WEIGHTED AVERAGE MINIMUM WEEKLY RATES(a) PAYABLE FOR A FULL WEEK'S WORK (EXCLUDING OVERTIME) AND INDEX NUMBERS OF WAGE RATES

	End of December—				
Industry group	*1951*	*1960*	*1966*	*1967*	*1968*
			RATES OF WAGE(b) ($)		
Manufacturing—					
Engineering, metals, vehicles, etc. . .	17.09	24.98	30.09	31.82	34.14
Textiles, clothing and footwear . .	17.12	24.07	28.75	30.60	32.38
Food, drink and tobacco . . .	16.58	24.63	29.87	31.47	33.62
Other manufacturing	16.88	24.80	30.03	31.69	33.80
All manufacturing groups . .	*16.99*	*24.46*	*29.41*	*31.17*	*33.16*
Transport and communication . .	17.75	26.02	33.07	35.31	37.92
Wholesale and retail trade . . .	17.11	26.36	32.26	34.21	36.89
Public authority (n.e.i.) and community and business services	17.01	25.78	32.40	34.64	36.54
Amusement, hotels, personal service, etc. .	16.68	24.50	29.74	31.38	34.04
All industry groups . . .	**17.03**	**25.17**	**30.70**	**32.57**	**34.84**

For footnotes *see* next page.

WEEKLY WAGE RATES: ADULT FEMALES, INDUSTRY GROUPS, AUSTRALIA DECEMBER 1951 TO 1968—*continued*

Industry group	*End of December—* *1951*	*1960*	*1966*	*1967*	*1968*
INDEX NUMBERS (*Base: Weighted Average Weekly Wage Rate for Australia*, 1954 = 100)					
Manufacturing—					
Engineering, metals, vehicles, etc.	85.9	125.5	151.2	159.8	171.5
Textiles, clothing and footwear	86.0	120.9	144.4	153.7	162.6
Food, drink and tobacco	83.3	123.7	150.0	158.1	168.9
Other manufacturing	84.8	124.6	150.9	159.2	169.8
All manufacturing groups	*85.4*	*122.9*	*147.7*	*156.6*	*166.6*
Transport and communication	89.2	130.7	166.1	177.4	190.5
Wholesale and retail trade	85.9	132.4	162.1	171.8	185.3
Public authority (n.e.i.) and community and business services	85.4	129.5	162.8	174.0	183.5
Amusement, hotels, personal service, etc.	83.8	123.1	149.4	157.6	171.0
All industry groups	**85.6**	**126.4**	**154.2**	**163.6**	**175.0**

(*a*) As prescribed in awards, determinations and agreements. (*b*) The amounts shown should not be regarded as actual current averages, but as an index expressed in money terms, indicative of trends.

Standard hours of work

In the fixation of weekly wage rates most industrial tribunals prescribe the number of hours constituting a full week's work for the wage rates specified. The hours of work so prescribed form the basis of the compilation of the weighted averages and index numbers on page 270. The main features of the reduction of hours to forty-four and later to forty per week are summarised on pages 268–6. In considering such changes, it must be remembered that even within individual States the authority to alter conditions of work is divided between Commonwealth and State industrial tribunals and the various legislatures, and that the State legislation usually does not apply to employees covered by awards of the Commonwealth Conciliation and Arbitration Commission. However, it may do so in respect of matters not treated in Commonwealth awards.

The 44-hour week

No permanent reduction to a 44-hour week was effected until 1925, although temporary reductions had been achieved earlier. In 1920 the New South Wales legislature granted a 44-hour week to most industries, but in the following year this provision was withdrawn. Also in 1920 the President of the Commonwealth Court of Conciliation and Arbitration (Higgins *J.*), after inquiry, granted a 44-hour week to the Timber Workers' Union, and in the following year he extended the same privilege to the Amalgamated Society of Engineers. In 1921, however, a reconstituted Commonwealth Court of Conciliation and Arbitration unanimously rejected applications by five trade unions for the shorter standard week and re-introduced the 48-hour week in the case of the above-mentioned two unions then working forty-four hours. During 1924 the Queensland Parliament passed legislation to operate from 1 July 1925 granting the 44-hour standard week to employees whose conditions of work were regulated by awards and agreements of the Queensland State industrial authority. Similar legislative action in New South Wales led to the re-introduction of the 44-hour week in that State as from 4 January 1926.

In 1927, after an exhaustive inquiry, the Commonwealth Court of Conciliation and Arbitration granted a 44-hour week to the Amalgamated Engineering Union and intimated that this reduction in standard hours of work would be extended to industries operating under conditions similar to those in the engineering industry. Applications for the shorter hours by other unions were, however, treated individually, the nature of the industry, the problem of production, the financial status, and the amount of foreign competition being fully investigated. The economic depression delayed the extension of the standard 44-hour week until the subsequent improvement in economic conditions made possible its general extension to employees under Commonwealth awards.

In States other than New South Wales and Queensland no legislation was passed to reduce the standard hours of work, so that, for employees not covered by Commonwealth awards, the change had to be effected by decisions of the appropriate industrial tribunals. In these cases the date on which the reduction to forty-four hours was implemented depended on the decision of the tribunals in particular industries, employees in some industries receiving the benefit of the reduced hours years ahead of those in others. In these States the change to the shorter week extended over the years from 1926 to 1941.

The 40-hour week

Standard Hours Inquiry, 1947. Soon after the end of the 1939–45 War applications were made to the Commonwealth Court of Conciliation and Arbitration for the introduction of a 40-hour week, and the hearing by the Court commenced in October 1945. Before the Court gave its decision the New South Wales Parliament passed legislation granting a 40-hour week, operative from 1 July 1947, to industries and trades regulated by State awards and agreements, and in Queensland similar legislation was introduced in Parliament providing for the 40-hour week to operate from 1 January 1948.

The Commonwealth Court of Conciliation and Arbitration, in its judgment of 8 September 1947, granted the reduction to the 40-hour week from the beginning of the first pay-period commencing in January 1948. The Queensland Act was passed, and was proclaimed on 10 October 1947. On 27 October 1947 the South Australian Industrial Court, after hearing applications by unions, approved the incorporation of the 40-hour standard week in awards of that State. The Court of Arbitration of Western Australia, on 6 November 1947, approved that, on application, provision for a 40-hour week could be incorporated in awards of the Court, commencing from 1 January 1948.

In Victoria and Tasmania the Wages Boards met and also incorporated the shorter working week in their determinations, so that from the beginning of 1948 practically all employees in Australia whose conditions of labour were regulated by industrial authorities had the advantages of a standard working week of forty hours or, in certain cases, less.

Basic Wage and Standard Hours Inquiry, 1952–53. In the 1952–53 Basic Wage and Standard Hours Inquiry the employers sought an increase in the standard hours of work per week, claiming that one of the chief causes of the high costs and inflation had been the loss of production due to the introduction of the 40-hour week. This claim was rejected by the Court, as it considered that the employers had not proved that the existing economic situation called for a reduction of general standards in the matter of the ordinary working week.

Basic Wage and Standard Hours Inquiry, 1961. The Commonwealth Conciliation and Arbitration Commission rejected an employers' claim for an increase in the number of ordinary working hours from 40 to 42 per week, with a concomitant increase in weekly wages by an amount equal to two hours' pay at ordinary rates. This was to be a temporary measure to have effect for four years, after which time hours would revert to 40 and the increased wage would remain.

Hourly wage rates

The average rates of wage in the preceding tables are based on the minimum rates prescribed for selected occupations in awards, etc. for a full week's work, excluding overtime. However, the number of hours constituting a full week's work differs in some instances between various occupations in each State, and between the same occupations in the several States. For some purposes a better comparison may be obtained by reducing the results in the preceding paragraphs to a common basis, namely the rate of wage per hour. The particulars of weighted average minimum hourly rates of wage given in the following tables relate to all industry groups except Rural, and Shipping and stevedoring. The Rural industry is not included in the index, and Shipping and stevedoring has been excluded because, for some of the occupations in this group, definite particulars for the computation of average working hours and hourly rates of wage are not available.

The following table shows the weighted average minimum hourly rates of wage payable to adult male workers and index numbers of hourly rates in each State.

HOURLY WAGE RATES(*a*): ADULT MALES
STATES, DECEMBER 1950 TO 1968

WEIGHTED AVERAGE MINIMUM HOURLY RATES PAYABLE AND INDEX NUMBERS OF HOURLY RATES

End of December—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
RATES OF WAGE(*b*) (cents)							
1950 . . .	51.63	50.48	48.83	49.53	50.29	49.52	50.58
1960 . . .	90.91	87.57	87.79	85.61	89.89	88.08	88.92
1966 . . .	108.40	107.08	109.09	104.47	108.84	108.53	107.81
1967 . . .	113.31	111.58	114.08	109.56	113.10	113.65	112.59
1968 . . .	123.83	122.36	122.51	120.29	119.96	122.87	122.62
INDEX NUMBERS (*Base: Weighted Average Hourly Wage Rates for Australia,* 1954 = 100)							
1950 . . .	73.0	71.4	69.0	70.0	71.1	70.0	71.5
1960 . . .	128.5	123.8	124.1	121.0	127.1	124.5	125.7
1966 . . .	153.2	151.3	154.2	147.7	153.8	153.4	152.4
1967 . . .	160.2	157.7	161.2	154.9	159.9	160.6	159.1
1968 . . .	175.0	172.9	173.2	170.0	169.6	173.7	173.3

(*a*) Weighted average hourly rates of wage for all industry groups except rural, and shipping and stevedoring. *See* page 269. (*b*) The amounts shown should not be regarded as actual current averages, but as an index expressed in money terms, indicative of trends.

The following table shows the weighted average minimum hourly rates of wage payable to adult female workers and index numbers of hourly rates in each State.

HOURLY WAGE RATES: ADULT FEMALES
STATES, DECEMBER 1951 TO 1968

WEIGHTED AVERAGE MINIMUM HOURLY RATES PAYABLE AND INDEX NUMBERS OF HOURLY RATES

End of December—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
RATES OF WAGE(*a*) (cents)							
1951 . . .	43.58	43.25	40.60	42.81	40.85	41.86	42.92
1960 . . .	66.09	61.94	60.28	61.08	63.14	60.37	63.44
1966 . . .	79.74	75.50	76.91	73.98	77.21	75.20	77.39
1967 . . .	84.24	80.48	82.40	78.71	80.46	79.79	82.10
1968 . . .	89.86	86.68	87.40	84.42	85.76	84.32	87.81
INDEX NUMBERS (*Base: Weighted Average Hourly Wage Rate for Australia,* 1954 = 100)							
1951 . . .	86.9	86.2	80.9	85.3	81.4	83.4	85.6
1960 . . .	131.7	123.5	120.1	121.7	125.8	120.3	126.4
1966 . . .	158.9	150.5	153.3	147.5	153.9	149.9	154.2
1967 . . .	167.9	160.4	164.3	156.9	160.4	159.0	163.6
1968 . . .	179.1	172.8	174.2	168.3	170.9	168.1	175.0

(*a*) The amounts shown should not be regarded as actual current averages, but as an index expressed in money terms, indicative of trends.

Weighted average standard weekly hours of work

The 40-hour week has operated in Australia generally from 1 January 1948, and in New South Wales from 1 July 1947 (*see* page 269.) However, as stated on page 269, the number of hours constituting a full week's work (excluding overtime) differs between occupations and or between States. The weighted average standard hours of work (excluding overtime) prescribed in awards, determinations and agreements for a full working week, in respect of adult male workers in all industry groups except Rural, and Shipping and stevedoring, at 31 December 1968, were: New South Wales, 39.95; Victoria, 39.97; Queensland, 39.98; South Australia, 39.96; Western Australia, 39.89; Tasmania, 39.97; Australia, 39.96. Corresponding figures for adult female workers at 31 December 1968 were: New South Wales, 39.53; Victoria, 39.81; Queensland, 39.70; South Australia, 39.77; Western Australia, 39.78; Tasmania, 39.63; Australia, 39.67.

Average weekly earnings

The figures in this section are derived from particulars of employment and of wages and salaries recorded on pay-roll tax returns, from other direct collections, and from estimates of the unrecorded balance. The figures relate to civilians only.

Particulars of wages and salaries paid are not available for males and females separately from these sources; average weekly earnings have therefore been calculated in terms of male units, i.e. total male employees plus fifty-five per cent of female employees. This proportion is derived from the estimated ratio of female to male earnings in Australia. As it was not possible to estimate the ratio of female to male earnings in the several States the same ratio has been used in each State. Because the actual ratio may vary between States precise comparisons between average earnings in different States cannot be made on the basis of the figures shown in the following table. Quarterly figures corresponding to those shown in the table are published in the monthly bulletin *Wage Rates and Earnings* and in the *Monthly Review of Business Statistics.*

Particulars of average weekly earnings per employed male unit are shown in the following table for each of the years 1958–59 to 1967–68.

AVERAGE WEEKLY EARNINGS PER EMPLOYED MALE UNIT(*a*)
STATES, 1958-59 TO 1967-68
($)

Year	*N.S.W.(b)*	*Vic.*	*Qld*	*S.A.(c)*	*W.A.*	*Tas.*	*Aust.*
1958–59	42.30	42.00	37.20	38.60	36.60	39.20	40.70
1959–60	45.70	45.50	39.40	41.80	39.20	41.90	43.90
1960–61	48.10	47.20	41.60	43.40	41.60	43.30	46.00
1961–62	49.10	48.50	43.20	44.70	43.00	45.30	47.20
1962–63	50.20	50.10	44.40	45.80	44.20	45.90	48.40
1963–64	52.60	52.50	46.90	48.20	47.20	48.40	50.90
1964–65	56.50	56.40	50.40	52.00	49.50	51.00	54.60
1965–66	58.60	59.20	52.50	53.80	54.10	53.80	57.00
1966–67	62.40	63.00	55.60	56.90	58.30	57.40	60.70
1967–68	66.00	66.80	58.80	60.40	62.50	61.00	64.30

(*a*) Includes, in addition to wages at award rates, earnings of salaried employees, overtime earnings, over-award and bonus payments, payments made in advance or retrospectively during the periods specified, etc. *See* explanatory notes above. (*b*) Includes Australian Capital Territory. (*c*) Includes Northern Territory.

The following table shows, for 'All industries' and for 'Manufacturing', the movement in average weekly earnings from 1958–59 to December quarter 1968. The 'All industries' index is based on payroll tax returns and other data. It relates to average weekly earnings per employed male unit. The index for manufacturing industries for the years to 1966–67 is based on the average earnings of male wage and salary earners employed in factories as disclosed by annual factory censuses (*see* the chapter Manufacturing Industry); figures for quarters subsequent to June quarter 1967 are preliminary estimates based on pay-roll tax returns.

The index numbers for 'All industries' and 'Manufacturing' show the movement in average earnings for each group over a period of time. However, they do not give, at any point of time, a comparison of actual earnings in the two groups. The base of each series is: year 1953–54 = 100, and both series have been seasonally adjusted.

INDEXES OF AVERAGE WEEKLY EARNINGS(*a*)(*b*): AUSTRALIA
YEARS 1958-59 TO 1967-68 AND QUARTERS SEPTEMBER 1966 TO DECEMBER 1968
SEASONALLY ADJUSTED
(*Base of each index: year* 1953–54 = 100)

Year	*All industries*	*Manufacturing*
1953–54	100.0	100.0
1958–59	124.5	125.6
1959–60	134.3	135.4
1960–61	140.6	141.1
1961–62	144.7	143.4
1962–63	148.3	147.7
1963–64	155.9	154.8
1964–65	167.3	167.1
1965–66	174.6	173.1
1966–67	186.0	184.3
1967–68	197.0	195.6

Quarter	*All industries*	*Manufacturing*
1966–67—September . .	182.0	181.1
December . .	183.8	182.5
March . .	187.0	185.3
June . . .	190.4	188.1
1967–68—September . .	194.1	192.2
December . .	195.9	193.7
March . .	197.6	197.6
June . . .	201.2	200.4
1968–69—September . .	203.3	202.3
December . .	209.7	208.7

(*a*) *See* footnote (*a*) to table on page 271. (*b*) Average earnings per employed male unit.

Surveys of wage rates, earnings and hours, 1960 to 1968

Since 1960 a number of statistical surveys of wages and hours of work in Australia have been undertaken by this Bureau. The object of these surveys has been to obtain information on wage rates, actual weekly earnings and hours of work on a more comprehensive scale than previously available in Australia. A summary of the scope and coverage of each of these surveys is shown on the following pages.

Survey of wage rates and earnings, September 1960

This survey, relating to the last pay-period in September 1960, obtained information about marginal rates of wage and the dissection and distribution of actual weekly earnings of adult male employees (excluding part-time and casual employees). In addition to the exclusion of government and semi-government employees, and private employees in rural industry and in private domestic service, the survey did not cover the following—shipping and stevedoring industries; the motion picture industry; certain businesses such as those of accountants, consultant engineers, etc.; and trade associations, etc. The survey was based on a stratified random sample of private employers in other industries who were subject to pay-roll tax (that is, employers paying more than $400 a week in wages and salaries). For information on the results of the survey *see* Year Book No. 51, pages 439 to 442.

Survey of weekly earnings, October 1961

This survey was conducted for the last pay-period in October 1961 and provided information about the distribution of actual weekly earnings for adult male employees (excluding part-time and casual employees). The survey did not cover government or semi-government employees, private employees in rural industry and in private domestic service, or employees not covered by pay-roll tax returns. The survey was based on a stratified random sample of private employers in other industries who were subject to pay-roll tax (that is, employers paying more than $400 a week in wages and salaries). The results of the survey were published in Year Book No. 51, pages 442–4.

Surveys of weekly earnings and hours, October 1962, 1963, 1964, 1966 and 1967

For details of these surveys *see* pages 273 to 281.

Survey of weekly earnings, October 1965

A survey of weekly earnings of male employees was conducted for the last pay-period in October 1965. The survey was conducted by means of: (i) a sample of private employers subject to pay-roll tax (that is those paying more than $400 a week in wages and salaries); (ii) a complete coverage of

Commonwealth and State government departments and semi-government authorities; and (iii) a sample of local government authorities. It related to certain specified industry groups only.

The industry groups excluded from this survey were: primary production; finance and property; public authority activities, n.e.i. (e.g. Commonwealth, State and local government administration); community and business services; amusement, hotels, cafés, personal service, etc. The survey also excluded waterside workers employed on a casual basis, and all employees in the Northern Territory and the Australian Capital Territory. The industry classification adopted was that used for the 1961 population census.

The object of the survey was to obtain estimates of the numbers and proportions of full-time adult male employees in various weekly earnings groups and a dissection of total weekly earnings paid to full-time adult males into: (i) overtime earnings; (ii) ordinary time earnings at 'award, etc. rates'; and (iii) ordinary time earnings in excess of those at 'award, etc. rates' (divided into (*a*) payment by measured result and (*b*) other) as defined. The survey also provided figures of average weekly earnings for full-time adult male and junior male employees. Separate details were obtained for (i) managerial, executive, professional and higher supervisory staff, and (ii) other full-time male employees. The results of the survey were published in previous issues of the Year Book. For further details *see Labour Report* No. 52, 1965 and 1966.

Information of a similar type was obtained in respect of September 1960 from a sample survey of private employers only. However, the 1965 survey, as well as adopting the standard industry classification used for the 1961 population census, differs from the 1960 survey also in the range of industries included. In addition, the 1965 survey was on a more comprehensive basis than that in 1960.

Surveys of weekly earnings and hours, October 1962 to October 1967

Sample surveys in respect of most private employers subject to pay-roll tax (i.e. those paying more than $400 per week in wages and salaries) have been conducted as at the last pay-period in October during recent years. Some results of the 1967 survey and comparisons with earlier such surveys are contained in the following tables. Further particulars including averages for each State were published in statistical bulletin, *Survey of Weekly Earnings and Hours*, October 1967.

In addition to obtaining data for the calculation of average weekly earnings, average weekly hours paid for, and average hourly earnings, the October 1966 and 1967 surveys obtained information on overtime and ordinary time earnings and hours for full-time employees (other than managerial, etc. staff). The figures of average overtime earnings and average overtime hours are the averages for *all* employees (in the specified category) represented in the survey whether or not they worked overtime. The survey figures do not show the average overtime earnings or hours of only those employees who worked overtime.

Figures for average weekly earnings, average weekly hours paid for, and average hourly earnings as at the selected pay-periods are presented for males and females (adult and junior) separately by industry groups and by States. They reflect the effects of differences (and of changes between points of time) in amounts paid for the various occupations; in amounts paid for the same occupations; in occupational structures within industries; in industry structure; in degrees of business activity (incidence of overtime, etc.); and in the incidence of incentive schemes, piece-work and profit-sharing scheme payments, etc.

The figures of average weekly earnings and hours shown in the following tables have been rounded to the first decimal place.

In general, where an establishment was closed down for part or whole of the last pay-period in October, or operations were seriously curtailed by an industrial dispute, breakdown, fire, etc., the employer was asked to supply particulars of wages and hours for the nearest normal pay-period.

Coverage

The results of the surveys are based on returns from stratified random samples of private employers subject to pay-roll tax. Employees in rural industry and in private domestic service are excluded because most employers in these two industries are not subject to pay-roll tax. Also excluded from the surveys are: employees of government and semi-government authorities; employees of religious, benevolent and other similar organisations exempt from pay-roll tax; and all employees in the Northern Territory and the Australian Capital Territory. The earnings and hours of waterside workers employed on a casual basis are excluded because they are subject to wide fluctuations for short periods such as those covered by these surveys.

Approximately 4,080 employers were included in the October 1967 survey and the sample represented 1,567,000 male and 684,000 female wage and salary earners.

As the survey was based on a sample, the resultant estimates are subject to sampling variability, that is, variations which might occur by chance because only a sample of employers was surveyed. The extent of the detail published has been determined after considering estimated measures of sampling variability.

Comparability of results

In addition to affecting the results of each sample survey, sampling variability also affects comparison between each year's results.

The industry classification adopted for the 1967 and previous earnings and hours surveys from 1963 onwards (including the 1965 survey) is that used for the 1961 and 1966 population censuses. Because the October 1962 survey was based on a different industry classification only broad comparison with more recent surveys is possible (*see* tables in previous Year Book). Some comparison of the results of the surveys of 1963, 1964, 1966 and 1967 are shown in the tables on pages 276 to 281.

The October 1965 Survey of Weekly Earnings was a special purpose survey on a different basis from the surveys compared in this section and, therefore, its results are not shown herein. Results of the 1965 survey were published in detail in *Labour Report* No. 52, 1965 and 1966.

In the surveys of October 1962, 1963 and 1964 employees 'whose hours of work were not known' were reported with managerial, etc. staff. Beginning with the October 1966 survey employers were asked to report these employees in their correct classification, and if necessary estimate their hours of work. It is considered that any reporting differences will have had only a slight effect on comparability of the surveys.

The allocation of employees between 'Managerial, executive, professional and higher supervisory staff' and 'All other full-time employees' (as defined) depends upon the employers' interpretation of the definitions (*see* below).

Definitions

The following definitions refer to terms used in the surveys and in the tables in this section.

Employees refers to male and female employees on the pay-roll and who received pay for the last pay-period in October.

Adults includes all employees 21 years of age and over and those employees who, although under 21 years of age, are paid at the adult rate for their occupation.

Juniors refers to those employees under 21 years of age who are not paid at the adult rate for their occupation.

Full-time employees refers to those employees who ordinarily work 30 hours or more a week and who received pay for the last pay-period in October. Included are 'full-time' employees on short-time; 'full-time' employees who began or ceased work during the pay-period; and 'full-time' employees on paid annual leave, paid sick leave, long service leave and paid holidays taken during the pay-period.

Part-time employees refers to employees who ordinarily work less than 30 hours a week. Employees on short-time who normally work 30 hours or more a week are classified as full-time employees.

Other than managerial, etc. staff includes minor supervisory employees, leading hands, clerical and office staff as well as ordinary wages employees. It excludes *managerial, executive, professional and higher supervisory staff* who were not further defined.

Weekly earnings refers to gross earnings for the last pay-period in October before taxation and other deductions have been made. It includes ordinary time earnings, overtime earnings, shift allowances, penalty rates, commission and similar payments; and that part of paid annual leave, paid sick leave, long service leave and paid holidays taken during the pay-period. It includes one week's proportion of payments made other than on a weekly basis, e.g. salary paid fortnightly or monthly; paid annual or other leave taken during the pay-period; periodical payments under incentive, piecework, profit sharing schemes, etc.; commissions; annual or periodical bonuses, etc. Retrospective payments are excluded.

Overtime earnings refers to that part of gross earnings for hours paid for in excess of award, standard or agreed hours of work. Overtime earnings were not reported for managerial, etc. staff.

Ordinary time earnings refers to that part of gross earnings for award, standard or agreed hours of work. It includes shift allowances, penalty rates, commissions, bonuses and incentive payments, and that part of paid annual and other leave, which relates to these hours.

Weekly man-hours paid for refers to the sum of man-hours for which payment was made. It includes ordinary time hours, overtime hours, paid stand-by or reporting time; and paid annual leave, paid sick leave, long service leave and paid holidays taken during the specified pay-period. For employees paid other than weekly, hours are converted to a weekly basis. For employees who began or ceased work, or were absent without pay for any reason during the specified week, only the man-hours actually paid for are included. Where agreed hours of work are less than award hours, man-hours are based on agreed hours. Hours of work were not reported for managerial, etc. staff.

Overtime hours refers to hours in excess of award, standard or agreed hours of work.

Ordinary time hours refers to award, standard or agreed hours of work. It includes man-hours of stand-by or reporting time which are part of standard hours of work, and that part of paid annual leave, paid sick leave and long service leave taken during the specified week.

AVERAGE WEEKLY EARNINGS AND HOURS (OVERTIME AND ORDINARY TIME)(*a*), FULL-TIME EMPLOYEES (OTHER THAN MANAGERIAL, ETC. STAFF)(*b*): INDUSTRY GROUPS AUSTRALIA(*c*), OCTOBER 1967(*d*)

Industry group	*Average weekly earnings ($)*			*Average weekly hours paid for*			*Average weekly earnings ($)*			*Average weekly hours paid for*		
	Over-time earnings	*Ordinary time earnings*	*Total*	*Over-time hours*	*Ordinary time hours*	*Total*	*Over-time earnings*	*Ordinary time earnings*	*Total*	*Over-time hours*	*Ordinary time hours*	*Total*
	ADULT MALES						JUNIOR MALES					
Manufacturing—												
Extracting, refining and founding of metals	10.80	56.40	67.30	5.5	39.0	44.5	3.40	30.80	34.20	2.5	38.9	41.5
Engineering and metal-working	11.40	53.80	65.30	5.6	38.6	44.2	3.20	28.80	32.00	2.8	38.0	40.9
Ships, vehicles, parts and accessories	9.60	55.50	65.10	4.4	38.7	43.1	2.50	29.00	31.60	2.2	38.8	41.0
Founding, engineering, vehicles, etc.	10.90	54.70	65.60	5.3	38.7	44.0	3.10	29.10	32.20	2.7	38.3	41.0
Textiles, clothing and footwear	7.60	52.50	60.00	4.0	38.8	42.8	2.80	26.90	29.70	2.5	38.6	41.1
Food, drink and tobacco	10.50	51.60	62.10	5.4	38.7	44.1	4.30	29.10	33.40	3.3	38.5	41.8
Paper, printing, bookbinding and photography	7.50	63.00	70.50	3.2	39.0	42.3	2.50	29.70	32.20	2.1	39.3	41.3
Chemicals, dyes, explosives, paints, non-mineral oils	8.10	57.30	65.30	3.6	38.9	42.5	3.30	33.20	36.50	2.4	39.0	41.3
Other	10.30	52.30	62.60	5.1	38.9	44.0	3.00	27.70	30.70	2.8	38.9	41.7
Manufacturing groups	*10.10*	*54.40*	*64.50*	*5.0*	*38.8*	*43.7*	*3.20*	*28.90*	*32.00*	*2.7*	*38.6*	*41.3*
Non-manufacturing—												
Mining and quarrying	12.50	69.00	81.50	5.8	38.0	43.8	3.90	37.10	41.00	3.1	38.1	41.1
Building and construction	11.90	57.50	69.40	5.2	38.4	43.6	2.50	30.50	33.00	2.0	39.3	41.3
Transport and storage	15.80	54.90	70.70	7.3	39.3	46.6	3.70	30.10	33.80	3.0	39.3	42.3
Finance and property	1.00	67.70	68.80	0.4	38.2	38.7	0.40	33.00	33.40	0.3	38.2	38.5
Wholesale trade, primary produce dealing, etc.	4.70	55.30	60.00	2.3	39.0	41.3	1.70	28.60	30.40	1.5	39.1	40.6
Retail trade	3.40	53.00	56.44	1.7	39.7	41.5	1.80	26.40	28.30	1.6	39.6	41.2
Other industries(*e*)	6.00	55.90	61.90	3.0	39.0	42.0	1.60	31.00	32.60	1.4	38.5	39.8
Non-manufacturing groups	*7.40*	*57.30*	*64.70*	*3.4*	*38.9*	*42.4*	*1.70*	*29.30*	*31.10*	*1.5*	*39.1*	*40.5*
All industry groups(*f*)	**9.00**	**55.70**	**64.60**	**4.3**	**38.8**	**43.1**	**2.40**	**29.10**	**31.50**	**2.1**	**38.8**	**40.9**
	ADULT FEMALES						JUNIOR FEMALES					
Manufacturing groups	2.00	34.30	36.30	1.5	37.8	39.3	0.80	22.80	23.70	0.9	38.3	39.2
Non-manufacturing groups	0.90	38.20	39.20	0.7	38.3	39.0	0.40	25.00	25.40	0.4	38.5	38.9
All industry groups(*f*)	**1.50**	**36.10**	**37.60**	**1.1**	**38.0**	**39.2**	**0.5**	**24.30**	**24.80**	**0.6**	**38.4**	**39.0**

(*a*) Average weekly overtime and ordinary time earnings and hours are averages for all employees represented in the survey (*see* page 274). (*b*) Private employees only. Excludes managerial, executive, professional and higher supervisory staff. (*c*) Excludes Northern Territory and Australian Capital Territory. (*d*) Last pay-period in October. For definitions and particulars of coverage of the survey, etc. *see* pages 273 4. (*e*) Includes community and business services; amusement, hotels, cafés, personal service, etc.; electricity, gas, water supply and sanitary services; and forestry, fishing and trapping. (*f*) Excludes rural industry, and private domestic service.

AVERAGE WEEKLY EARNINGS, FULL-TIME EMPLOYEES (OTHER THAN MANAGERIAL, ETC. STAFF)(*a*): INDUSTRY GROUPS, AUSTRALIA(*b*), OCTOBER 1964, 1966, AND 1967(*c*)

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Industry group	*Adult males*			*Junior males*			*Adult females*			*Junior females*		
	Oct. 1964	*Oct. 1966*	*Oct. 1967*	*Oct. 1964*	*Oct. 1966*	*Oct. 1967*	*Oct. 1964*	*Oct. 1966*	*Oct. 1967*	*Oct. 1964*	*Oct. 1966*	*Oct. 1967*
Manufacturing—												
Extracting, refining and founding of metals . . .	58.70	62.80	67.30	31.10	35.80	34.20	32.20	36.40	39.60	25.00	27.70	28.00
Engineering and metal-working . .	55.50	61.60	65.30	26.50	29.60	32.00	31.50	34.00	35.90	21.40	23.80	25.70
Ships, vehicles, parts and accessories .	55.70	60.50	65.10	25.50	28.40	31.60	31.80	35.90	37.20	23.60	25.20	26.70
Founding, engineering, vehicles, etc. . . .	56.10	61.50	65.60	27.00	30.20	32.20	31.60	34.40	36.30	22.10	24.40	26.10
Textiles, clothing and footwear . .	51.60	57.50	60.00	25.70	29.30	29.70	31.30	33.70	35.70	19.30	21.10	21.10
Food, drink and tobacco . . .	52.00	58.00	62.10	26.10	30.10	33.40	32.30	33.90	36.60	20.50	22.70	25.00
Paper, printing, bookbinding and photography . . .	60.70	66.60	70.50	26.90	29.30	32.20	33.50	36.50	37.60	20.00	24.10	24.50
Chemicals, dyes, explosives, paints, non-mineral oils . .	55.60	63.00	65.30	28.70	33.30	36.50	33.40	36.30	38.00	23.00	25.70	27.90
Other . . .	53.20	58.50	62.60	24.60	27.80	30.70	30.80	34.10	36.10	19.60	23.60	24.80
Manufacturing groups . .	*55.00*	*60.70*	*64.50*	*26.40*	*29.70*	*32.00*	*31.70*	*34.30*	*36.30*	*20.30*	*22.80*	*23.70*
Non-manufacturing—												
Mining and quarrying	*f*65.50	76.10	81.50	31.90	35.50	41.00	35.90	42.60	45.30	25.50	28.30	29.70
Building and construction . . .	59.90	67.90	69.40	26.80	29.90	33.00	34.50	39.70	41.50	22.10	25.30	28.60
Transport and storage	59.60	67.60	70.70	26.70	31.40	33.80	35.20	38.30	42.20	23.10	26.40	27.80
Finance and property	57.40	64.30	68.80	27.40	31.90	33.40	35.70	38.90	42.00	23.60	26.30	27.70
Wholesale trade, primary produce dealing, etc. . . .	52.50	57.30	60.00	24.40	28.30	30.40	34.00	37.30	39.40	21.70	24.10	25.50
Retail trade . .	49.70	54.30	56.40	24.00	26.50	28.30	33.00	35.20	37.70	19.50	22.00	23.50
Other industries(*d*) .	53.30	58.50	61.90	27.20	30.50	32.60	33.40	36.70	38.50	22.10	24.40	25.60
Non-manufacturing groups . .	*55.40*	*61.90*	*64.70*	*25.40*	*29.10*	*31.10*	*33.70*	*36.80*	*39.20*	*21.30*	*23.90*	*25.40*
All industry groups(*e*) . .	55.20	61.20	64.60	25.90	29.40	31.50	32.60	35.40	37.60	20.90	23.60	24.80

(*a*) Private employees only. Excludes managerial, executive, professional and higher supervisory staff. (*b*) Excludes Northern Territory and Australian Capital Territory. (*c*) Last pay-period in October. For definitions and particulars of coverage of the surveys, etc. *see* pages 273–4. (*d*) Includes community and business services; amusement, hotels, cafés, personal service, etc.; electricity, gas, water and sanitary services; and forestry, fishing and trapping. (*e*) Excludes rural industry, and private domestic service. (*f*) Affected by industrial disputes.

AVERAGE WEEKLY HOURS PAID FOR, FULL-TIME EMPLOYEES (OTHER THAN MANAGERIAL, ETC. STAFF)(*a*): INDUSTRY GROUPS, AUSTRALIA(*b*) OCTOBER 1964, 1966, AND 1967(*c*)

Industry group	*Adult males*			*Junior males*			*Adult females*			*Junior females*		
	Oct. 1964	*Oct. 1966*	*Oct. 1967*	*Oct. 1964*	*Oct. 1966*	*Oct. 1967*	*Oct. 1964*	*Oct. 1966*	*Oct. 1967*	*Oct. 1964*	*Oct. 1966*	*Oct. 1967*
Manufacturing—												
Extracting, refining and founding of metals . . .	44.2	44.3	44.5	41.2	41.5	41.5	40.0	39.8	39.9	39.7	39.8	39.7
Engineering and metal-working . .	44.3	44.2	44.2	42.3	41.5	40.9	39.7	39.7	39.0	39.6	39.7	39.0
Ships, vehicles, parts and accessories .	42.9	42.6	43.1	40.8	41.1	41.0	39.4	39.2	39.5	39.3	38.7	38.8
Founding, engineering, vehicles, etc.	43.9	43.8	44.0	41.8	41.4	41.0	39.7	39.6	39.1	39.6	39.6	39.0
Textiles, clothing and footwear . .	42.7	42.9	42.8	41.1	41.5	41.1	39.7	39.3	39.1	39.6	39.3	39.0
Food, drink and tobacco . . .	43.1	43.5	44.1	41.1	41.4	41.8	39.4	39.5	39.9	39.5	39.2	39.5
Paper, printing, bookbinding and photography . . .	42.2	42.3	42.3	41.1	41.0	41.3	39.9	39.7	39.8	39.9	39.7	39.7
Chemicals, dyes, explosives, paints, non-mineral oils . .	42.9	42.3	42.5	41.2	39.9	41.3	39.5	39.0	39.2	38.8	39.0	39.0
Other . . .	43.2	43.5	44.0	41.4	40.8	41.7	39.9	39.4	39.8	39.3	38.9	39.1
Manufacturing groups . .	*43.4*	*43.5*	*43.7*	*41.5*	*41.2*	*41.3*	*39.7*	*39.4*	*39.3*	*39.5*	*39.3*	*39.2*
Non-manufacturing—												
Mining and quarrying	42.7	42.9	43.8	41.2	41.0	41.1	38.9	38.1	38.1	39.2	39.5	38.7
Building and construction . . .	43.7	44.5	43.6	40.8	41.5	41.3	38.5	38.6	38.6	38.0	38.4	39.1
Transport and storage	45.2	46.4	46.6	40.7	42.0	42.3	39.5	39.2	39.4	39.3	39.0	39.1
Finance and property	38.9	38.7	38.7	38.6	38.2	38.5	37.5	37.8	37.9	38.0	38.1	38.1
Wholesale trade, primary produce dealing, etc.	41.2	41.3	41.3	40.1	40.2	40.6	38.8	38.7	39.0	39.2	38.9	38.8
Retail trade . .	41.2	41.3	41.5	40.7	40.7	41.2	39.8	39.4	39.5	40.0	39.9	39.7
Other industries(*d*) .	41.2	41.6	42.0	39.3	39.2	39.8	39.0	39.1	39.0	38.5	38.2	37.8
Non-manufacturing groups . .	*42.0*	*42.4*	*42.4*	*40.1*	*40.1*	*40.5*	*39.0*	*39.0*	*39.0*	*39.2*	*39.0*	*38.9*
All industry groups(*e*) . .	42.8	43.0	43.1	40.8	40.7	40.9	39.4	39.2	39.2	39.3	39.1	39.0

(*a*) Private employees only. Excludes managerial, executive, professional and higher supervisory staff. (*b*) Excludes Northern Territory and Australian Capital Territory. (*c*) Last pay-period in October. For definitions and particulars of coverage of the surveys, etc. *see* pages 273–4. (*d*) Includes community and business services; amusement, hotels, cafés, personal service, etc.; electricity, gas, water and sanitary services; and forestry, fishing and trapping. (*e*) Excludes rural industry, and private domestic service.

AVERAGE HOURLY EARNINGS, FULL-TIME EMPLOYEES (OTHER THAN MANAGERIAL, ETC. STAFF)(*a*): INDUSTRY GROUPS, AUSTRALIA(*b*), OCTOBER 1964, 1966, AND 1967(*c*)

($)

Industry group	*Adult males*			*Junior males*			*Adult females*			*Junior females*		
	Oct. 1964	*Oct. 1966*	*Oct. 1967*	*Oct. 1964*	*Oct. 1966*	*Oct. 1967*	*Oct. 1964*	*Oct. 1966*	*Oct. 1967*	*Oct. 1964*	*Oct. 1966*	*Oct. 1967*
Manufacturing—												
Extracting, refining and founding of metals	1.33	1.42	1.51	0.76	0.86	0.83	0.80	0.92	0.99	0.63	0.70	0.71
Engineering and metal-working	1.25	1.39	1.48	0.63	0.71	0.78	0.79	0.86	0.92	0.54	0.60	0.66
Ships, vehicles, parts and accessories	1.30	1.42	1.51	0.63	0.69	0.77	0.81	0.92	0.94	0.60	0.65	0.69
Founding, engineering, vehicles, etc.	1.28	1.41	1.49	0.65	0.73	0.79	0.80	0.87	0.93	0.56	0.62	0.67
Textiles, clothing and footwear	1.21	1.34	1.40	0.62	0.71	0.72	0.79	0.86	0.91	0.49	0.54	0.54
Food, drink and tobacco	1.21	1.34	1.41	0.64	0.73	0.80	0.82	0.86	0.92	0.52	0.58	0.63
Paper, printing, bookbinding and photography	1.44	1.57	1.67	0.65	0.71	0.78	0.84	0.92	0.95	0.50	0.61	0.62
Chemicals, dyes, explosives, paints, non-mineral oils	1.30	1.49	1.54	0.70	0.84	0.88	0.84	0.93	0.97	0.59	0.66	0.72
Other	1.23	1.34	1.42	0.59	0.68	0.74	0.77	0.87	0.91	0.50	0.61	0.64
Manufacturing groups	*1.27*	*1.40*	*1.48*	*0.64*	*0.72*	*0.78*	*0.80*	*0.87*	*0.92*	*0.51*	*0.58*	*0.60*
Non-manufacturing—												
Mining and quarrying	1.53	1.77	1.86	0.77	0.87	1.00	0.92	1.12	1.19	0.65	0.71	0.77
Building and construction	1.37	1.52	1.59	0.66	0.72	0.80	0.90	1.03	1.07	0.58	0.66	0.73
Transport and storage	1.32	1.46	1.52	0.65	0.75	0.80	0.89	0.98	1.07	0.59	0.68	0.71
Finance and property	1.48	1.66	1.78	0.71	0.83	0.87	0.95	1.03	1.11	0.62	0.69	0.73
Wholesale trade, primary produce dealing, etc.	1.27	1.39	1.45	0.61	0.70	0.75	0.88	0.96	1.01	0.55	0.62	0.66
Retail trade	1.21	1.31	1.36	0.59	0.65	0.69	0.83	0.89	0.96	0.49	0.55	0.59
Other industries(*d*)	1.29	1.40	1.47	0.69	0.78	0.82	0.86	0.94	0.99	0.57	0.64	0.68
Non-manufacturing groups	*1.32*	*1.46*	*1.53*	*0.63*	*0.72*	*0.77*	*0.86*	*0.94*	*1.00*	*0.54*	*0.61*	*0.65*
All industry groups(*e*)	1.29	1.42	1.50	0.64	0.72	0.77	0.83	0.90	0.96	0.53	0.60	0.64

(*a*) Private employees only. Excludes managerial, executive, professional and higher supervisory staff. (*b*) Excludes Northern Territory and Australian Capital Territory. (*c*) Last pay-period in October. For definitions and particulars of coverage of the surveys, etc. *see* pages 273–4. (*d*) Includes community and business services; amusement, hotels, cafés, personal service, etc.; electricity, gas, water and sanitary services; and forestry, fishing and trapping. (*e*) Excludes rural industry, and private domestic service.

In the following table the average weekly earnings, average weekly hours paid for, and average hourly earnings at the last pay-period in October for the years 1963, 1964, 1966 and 1967 are shown for full-time males and females (adult and junior), by State.

AVERAGE EARNINGS AND HOURS FOR FULL TIME EMPLOYEES (OTHER THAN MANAGERIAL, ETC. STAFF)(*a*): ALL INDUSTRY GROUPS, STATES OCTOBER 1963, 1964, 1966, AND 1967(*b*)

State	*Average weekly earnings ($)*				*Average weekly hours paid for*				*Average hourly earnings ($)*			
	Oct. 1963	*Oct. 1964*	*Oct. 1966*	*Oct. 1967*	*Oct. 1963*	*Oct. 1964*	*Oct. 1966*	*Oct. 1967*	*Oct. 1963*	*Oct. 1964*	*Oct. 1966*	*Oct. 1967*
ADULT MALES												
New South Wales	52.70	56.70	61.90	65.70	42.1	42.8	42.7	43.0	1.25	1.32	1.45	1.53
Victoria	51.70	55.80	62.10	65.20	42.8	42.9	43.3	43.3	1.21	1.30	1.43	1.51
Queensland	48.50	52.30	59.50	62.10	42.2	43.1	42.8	42.9	1.15	1.21	1.39	1.45
South Australia	49.30	53.60	58.00	60.90	42.7	43.2	42.9	43.1	1.15	1.24	1.35	1.41
Western Australia	47.20	49.90	60.40	65.10	41.4	42.2	43.5	44.2	1.14	1.18	1.39	1.47
Tasmania	48.90	52.40	60.10	62.20	41.4	41.7	42.6	42.0	1.18	1.26	1.41	1.48
Australia(*c*)	**51.20**	**55.20**	**61.20**	**64.60**	**42.3**	**42.8**	**43.0**	**43.1**	**1.21**	**1.29**	**1.42**	**1.50**
JUNIOR MALES												
New South Wales	24.60	27.20	30.30	32.20	40.4	40.8	40.4	40.7	0.61	0.67	0.75	0.79
Victoria	23.70	26.80	29.70	32.00	40.6	40.8	40.7	41.0	0.58	0.66	0.73	0.78
Queensland	22.50	24.40	28.70	31.50	40.7	40.9	41.1	41.2	0.55	0.60	0.70	0.76
South Australia	22.50	24.80	27.70	30.30	41.2	40.9	40.8	40.8	0.55	0.61	0.68	0.74
Western Australia	20.70	21.40	27.10	28.80	40.4	40.8	41.0	41.1	0.51	0.53	0.66	0.70
Tasmania	22.70	24.40	27.80	30.90	40.2	40.1	40.7	40.4	0.56	0.61	0.68	0.77
Australia(*c*)	**23.50**	**25.90**	**29.40**	**31.50**	**40.5**	**40.8**	**40.7**	**40.9**	**0.58**	**0.64**	**0.72**	**0.77**
ADULT FEMALES												
New South Wales	31.50	33.40	36.20	38.40	39.0	39.2	39.0	38.9	0.81	0.85	0.93	0.99
Victoria	30.20	32.60	35.10	37.60	39.4	39.4	39.3	39.3	0.77	0.83	0.89	0.96
Queensland	29.30	30.90	33.90	36.10	39.5	39.7	39.6	39.3	0.74	0.78	0.86	0.92
South Australia	28.50	31.10	33.70	35.80	40.0	40.0	39.7	39.8	0.71	0.78	0.85	0.90
Western Australia	29.50	30.50	35.10	36.20	39.6	39.7	39.3	39.6	0.75	0.77	0.89	0.91
Tasmania	29.10	30.60	33.70	35.70	39.2	39.0	39.1	38.8	0.74	0.78	0.86	0.92
Australia(*c*)	**30.50**	**32.60**	**35.40**	**37.60**	**39.3**	**39.4**	**39.2**	**39.2**	**0.78**	**0.83**	**0.90**	**0.96**
JUNIOR FEMALES												
New South Wales	20.60	22.00	24.20	25.50	38.9	39.2	39.0	38.9	0.53	0.56	0.62	0.66
Victoria	19.50	21.70	24.90	25.70	38.8	39.1	38.9	38.7	0.50	0.55	0.64	0.67
Queensland	17.90	19.10	21.70	23.20	39.2	39.8	39.3	39.4	0.46	0.48	0.55	0.59
South Australia	18.20	20.10	22.30	23.70	39.3	39.4	39.5	39.2	0.46	0.51	0.57	0.61
Western Australia	17.20	17.40	21.10	22.70	39.9	39.5	39.3	39.3	0.43	0.44	0.54	0.58
Tasmania	18.40	19.40	22.00	23.80	39.1	39.7	39.5	38.9	0.47	0.49	0.56	0.61
Australia(*c*)	**19.40**	**20.90**	**23.60**	**24.80**	**39.0**	**39.3**	**39.1**	**39.0**	**0.50**	**0.53**	**0.60**	**0.64**

(*a*) Private employees only. Excludes managerial, executive, professional, and higher supervisory staff. (*b*) Last pay-period in October. For definitions and particulars of the coverage of the surveys, etc. *see* pages 273–4. (*c*) Excludes Northern Territory and Australian Capital Territory.

AVERAGE WEEKLY EARNINGS, FULL-TIME MALE MANAGERIAL, EXECUTIVE, ETC. STAFF(a): INDUSTRY GROUPS, AUSTRALIA(b), OCTOBER 1967(c)

Industry group	*Average weekly earnings*
Manufacturing—	$
Extracting, refining and founding of metals	120.20
Engineering and metalworking	104.60
Ships, vehicles, parts and accessories	107.20
Founding, engineering, vehicles, etc.	106.60
Textiles, clothing and footwear	100.60
Food, drink and tobacco	98.00
Paper, printing, bookbinding and photography	109.90
Chemicals, dyes, explosives, paints, non-mineral oils	112.90
Other	101.40
Manufacturing groups	*104.60*
Non-manufacturing—	
Mining and quarrying	134.90
Building and construction	103.00
Transport and storage	103.60
Finance and property	110.80
Wholesale trade, primary produce dealing, etc.	105.30
Retail trade	84.50
Other industries(d)	102.10
Non-manufacturing groups	*101.60*
All industry groups(e)	**102.90**

(a) Private employees only. Includes managerial, executive, professional and higher supervisory staff. For definitions and particulars of coverage of the surveys, etc. *see* pages 273–4. (b) Excludes Northern Territory and Australian Capital Territory. (c) Last pay-period in October. (d) Includes community and business services; amusement, hotels, cafés, personal service, etc.; electricity, gas, water and sanitary services; and forestry, fishing and trapping. (e) Excludes rural industry, and private domestic service.

AVERAGE WEEKLY EARNINGS, FULL-TIME MALE MANAGERIAL, EXECUTIVE, ETC. STAFF(a): INDUSTRY GROUPS, STATES, OCTOBER 1963, 1964, 1966 AND 1967

($)

Survey	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.(b)*
MANUFACTURING GROUPS							
October(c)—							
1963	83.00	82.90	74.50	77.90	68.00	76.00	81.20
1964	88.80	87.30	79.50	82.90	74.40	84.80	86.50
1966	101.00	101.40	86.50	98.40	88.90	99.40	99.40
1967	106.50	107.50	90.50	101.00	95.80	97.20	104.60
NON-MANUFACTURING GROUPS							
October(c)—							
1963	82.50	83.00	76.50	70.80	69.70	67.90	79.30
1964	88.00	85.30	79.90	77.20	74.30	71.10	83.70
1966	98.90	99.10	88.30	84.50	93.40	87.90	96.00
1967	105.10	105.50	94.80	87.70	96.80	90.30	101.60
ALL INDUSTRY GROUPS(e)							
October(c)—							
1963	82.90	82.90	75.90	73.60	69.20	71.30	80.20
1964	88.40	86.40	79.70	79.10	74.30	76.80	85.00
1966	99.80	100.20	87.70	89.90	92.10	92.90	97.40
1967	105.70	106.50	93.20	92.70	96.50	93.40	102.90

For footnotes *see* table above.

AVERAGE WEEKLY EARNINGS, FULL-TIME FEMALE MANAGERIAL, EXECUTIVE, ETC. STAFF(*a*): INDUSTRY GROUPS, AUSTRALIA(*b*), OCTOBER 1963, 1964, 1966 AND 1967

($)

Survey	*Manu-facturing groups*	*Non-manu-facturing groups*	*All industry groups(e)*
October(*c*)—			
1963	35.80	40.20	37.80
1964	38.70	44.20	41.40
1966	54.10	55.20	54.80
1967	60.50	58.90	59.40

For footnotes *see* table on page 280.

AVERAGE EARNINGS AND HOURS, PART-TIME EMPLOYEES(*a*): INDUSTRY GROUPS AUSTRALIA(*b*), OCTOBER 1963, 1964, 1966 AND 1967(*c*)

	Adult males	*Junior males*	*Adult females*			*Junior females*
Survey	*All industry groups(d)*	*All industry groups(d)*	*Manu-facturing groups*	*Non-manu-facturing groups*	*All industry groups(d)*	*All industry groups(d)*
AVERAGE WEEKLY EARNINGS ($)						
October(*c*)—						
1963	16.20	4.90	15.10	14.90	14.90	6.10
1964	16.60	4.70	16.90	15.20	15.50	4.40
1966	19.70	4.50	18.70	17.40	17.70	4.50
1967	20.10	4.40	20.10	18.30	18.70	4.60
AVERAGE WEEKLY HOURS PAID FOR						
October(*c*)—						
1963	13.6	7.7	16.9	17.2	17.2	9.7
1964	13.4	6.7	19.8	16.8	17.3	6.4
1966	14.1	6.1	19.4	16.6	17.1	7.0
1967	14.1	5.8	19.3	16.8	17.3	6.3
AVERAGE HOURLY EARNINGS ($)						
October(*c*)—						
1963	1.18	0.64	0.89	0.86	0.87	0.62
1964	1.24	0.70	0.85	0.91	0.90	0.69
1966	1.40	0.73	0.97	1.05	1.03	0.65
1967	1.43	0.76	1.04	1.09	1.08	0.73

(*a*) Private employees only. Part-time employees are those who normally work less than 30 hours a week. For definitions and particulars of coverage of the surveys, etc. *see* pages 273–4. (*b*) Excludes Northern Territory and Australian Capital Territory. (*c*) Last pay-period in October. (*d*) Excludes rural industry, and private domestic service.

Survey of weekly earnings and hours, October 1968

The results of this survey were first published in a mimeographed statement *Survey of Weekly Earnings and Hours, October 1968* (dated 9 July 1969) which also contains comparisons with the surveys of October 1962, 1963, 1964, 1966 and 1967.

Determination of wage rates in Australia

Before June 1967, when the Commonwealth Conciliation and Arbitration Commission decided to eliminate basic wages and margins from Commonwealth awards and to introduce total wages (*see* below), the concept of a basic or living wage was common to wage rates determined by industrial authorities in Australia. Initially, the concept of a basic wage (for adult males) was interpreted as the wage necessary to maintain an average employee and his family in a reasonable state of comfort. However, it was later generally accepted that the basic wage should be fixed at the highest amount which the economy could sustain and that the dominant factor was the capacity of the community to carry the resultant wage levels. Basic wages were determined for adult females as well as for adult males.

In addition to the basic wage, secondary wage payments, including margins for skill, etc. and various kinds of loadings peculiar to the occupation or industry, were determined by industrial authorities. The basic wage and the secondary wage made up the minimum wage rate for a particular occupation.

In the following paragraphs is set out a brief history of the determination of wage rates in Australia by Commonwealth and State industrial authorities. For more detailed information including the history of basic wage determination in Australia *see* previous issues of the Year Book and the annual *Labour Report*.

Commonwealth Basic Wage

Basic wages were a feature of awards of the Commonwealth Conciliation and Arbitration Commission (and the Commonwealth Court of Conciliation and Arbitration) over the period 1907 to 1967.

In 1907 the first declaration of a basic wage ($4.20 a week for Melbourne) was made by Mr Justice Higgins, President of the Commonwealth Court of Conciliation and Arbitration. The wage was known as the 'Harvester' wage and the amount was considered reasonable 'for a family of about five'. From this date onwards basic wages became incorporated into Commonwealth awards.

In 1913 the Commonwealth Court of Conciliation and Arbitration took cognisance of the 'A' Series retail price index numbers for the thirty more important towns of Australia published by the Commonwealth Statistician, and as awards came up for review the Court usually revised the basic wage rate of the award in proportion to variations in the retail price index. In 1921 the system of making automatic quarterly adjustments to the basic wage in direct ratio to variations in 'A' Series retail price index numbers was first introduced. The practice of making automatic quarterly adjustments to the basic wage in proportion to variations in retail price index numbers continued until September 1953.

In addition to the automatic adjustments to the basic wage described in the previous paragraph, basic wage rates in Commonwealth awards were varied as a result of basic wage or national wage inquiries. The last time basic wages were varied in this way was in July 1966, when, as a result of the Basic Wage, Margins and Total Wage Cases of 1966, rates were increased by $2 a week for adult males and $1.50 a week for adult females. At that time Commonwealth basic wage rates for capital cities ranged from $31 to $33.50 a week for adult males and from $23.25 to $25.10 a week for adult females. These rates continued to operate until the decision of the Commonwealth Conciliation and Arbitration Commission in the National Wage Cases of 1967 to eliminate basic wages and margins from Commonwealth awards and introduce total wages to operate from the beginning of the first pay-period to commence on or after 1 July 1967 (*see* page 284).

For tables showing Commonwealth basic wage rates for adult males and adult females *see* previous issues of the Year Book and the Appendix to *Labour Report* No. 52, 1965 and 1966.

Basic wage rates for females

As a result of the 1949–50 Basic Wage Inquiry the Commonwealth Court of Conciliation and Arbitration fixed the basic weekly wage for adult females at 75 per cent of the corresponding male rate from the beginning of the first pay-period commencing in December 1950. This percentage continued to be prescribed in subsequent inquiries and operated until the basic wage was eliminated from Commonwealth Awards in July 1967 (*see* above). Prior to December 1950 the relationship of female basic wages to male basic wages varied from award to award, but was generally between 54 and 56 per cent.

For further particulars regarding female basic wage rates *see Labour Report* No. 46, pages 75–81. Tables of rates are published in the Appendix to *Labour Report* No. 52, 1965 and 1966.

Basic wage rates, Australian Territories

The determination of basic wage rates in the Northern Territory and the Australian Capital Territory came within the jurisdiction of the Commonwealth Conciliation and Arbitration Commission. Basic wage rates were eliminated from awards operating in these Territories in July 1967 (*see* page 282), and total wages were introduced. For tables of basic wages in the Northern Territory and the Australian Capital Territory *see* Appendix to *Labour Report* No. 52, 1965 and 1966. For further information on the determination of basic wages in the Territories *see* previous issues of the Year Book and the annual *Labour Report*.

Commonwealth wage margins

In addition to basic wage rates, awards of Commonwealth and State industrial tribunals specified secondary wage payments consisting of margins and loadings. Margins have been defined as 'minimum amounts awarded above the basic wage to particular classifications of employees for the features attaching to their work which justify payments above the basic wage, whether those features are skill or experience required for the performance of that work, its particularly laborious nature, or the disabilities attached to its performance.'

In the Commonwealth jurisdiction prior to 1954 the Commonwealth Court of Conciliation and Arbitration had not made any general determination in respect of wage margins, but general principles of marginal rate fixation had been enunciated by the Court in the Engineers Case of 1924, the Merchant Service Guild Case in 1942, and the Printing Trades Case of 1947. Major decisions of the Commonwealth Court of Conciliation and Arbitration, and later the Commonwealth Conciliation and Arbitration Commission, affecting margins in Commonwealth awards were made in 1954, 1959, 1963, 1965, and 1966. Details of these decisions can be found in earlier issues of the Year Book and the annual *Labour Report*.

As a result of a decision of the Commonwealth Conciliation and Arbitration Commission in the National Wage Cases of 1967, basic wages and margins were eliminated from Commonwealth awards and total wages were introduced with effect from the beginning of the first pay-period to commence on or after 1 July 1967.

Commonwealth work value inquiries

In addition to variations of wage margins in Commonwealth awards as a result of the general inquiries in 1954 to 1966 (*see* above), variations of margins for various occupations were made by the Commission as individual awards came up for review or upon application by trade unions. Similar procedures existed in regard to awards of State industrial tribunals.

As a result of its decision in the Basic Wage, Margins and Total Wage Cases of 1966, the Commonwealth Conciliation and Arbitration Commission undertook a work value inquiry concerning classifications appearing in the Metal Trades award. The inquiry proceeded by way of detailed inspections of the work in factories performed by various classifications specified in the award, visits to training schools, and a formal hearing at which there were taken the sworn evidence and submissions called or made on behalf of the respective parties and interveners. The inspections and visits to training schools took place over the period September 1966 to September 1967. Formal hearing commenced on 21 September 1967 and concluded on 17 November 1967. On 11 December 1967 the Commission issued a majority decision (Gallagher *J.* and Commissioner Winter, with Moore *J.* dissenting).

On behalf of the majority Gallagher *J.* made an announcement which included the following:

> ' In this Inquiry the Commissioner and I would determine that:—
>
> (1) ' Wage increases where granted for adult male employees working under clause 4 of the Metal Trades Award 1952 (as varied) should be awarded on a work value basis, not otherwise, and should be those as set out in the schedule marked A which is now handed down.
>
> (2) 'Wage increases where granted for adult female employees should be 75 per cent of the appropriate increase for adult males with a flat rate for employees at the third class machinist level or below.
>
> (3) 'The claim for retrospectivity should be refused.
>
> (4) 'The appropriate variation should come into operation from the beginning of the first pay period to commence on or after 22 January 1968 and should remain in force for three years thereafter with liberty to apply to the Commissioner in the metal trades industry reserved to the parties.

'Upon reference to the schedule marked A, it will be seen that it has been found practicable to determine rates for classifications generally, that is to say for 320 classifications. Of these it will be seen that for 18 classifications there would be no increase in wage rates, that for 178 classifications there would be an increase of $1.00 per week, that for 9 classifications there would be an increase of $1.30 per week, that for 27 classifications there would be an increase of $2.75 per week, that for 16 classifications there would be an increase of $3.75 per week, that for 47 tradesmen classifications there would be an increase of $7.40 per week and that for the remaining 25 classifications there would be increases of varying amounts ranging between 10 cents and $10.05 per week.' . . .

'We explain that the rates shown in schedule A are those appropriate for Victoria–elsewhere. The equivalent award rates for the principal localities named below are to be ascertained by adjusting the Victoria-elsewhere rates as follows: Sydney add $0.80, Brisbane deduct $1.70, Adelaide deduct $0.40, Hobart add $0.70.

'With regard to over award payments we direct particular attention to the reasons of Mr Commissioner Winter commencing at page 63 and to [the reasons of Gallagher *J.*] commencing at page 151. We emphasise that the increases which we would grant would apply to existing award wages and it should not be assumed by employees that over award payments cannot or will not be offset against them. We also emphasise that this is not a case in which increases in wage rates for the metal trades set a pattern for wages in other industries. The increases which we would grant reached as they have been on a work value basis relate solely to employees working under clause 4 of the Metal Trades Award and do not constitute a reason for awarding wage increases to employees covered by other awards or working in other industries.'

Following applications by employers concerning the question of absorption in over-award payments of the increases granted to the metal trades in December 1967, the Commonwealth Conciliation and Arbitration Commission, consisting of Kirby *C.J.*, Gallagher and Moore *JJ.*, Senior Commissioner Taylor and Commissioner Winter, heard submissions by employers and trade unions on 14 to 16 February 1968.

The pronouncement of the majority of the Commission (Gallagher *J.* dissenting) was made on 21 February 1968. The Commission said it appeared that substantial absorption of over-award payments had not been practicable in the existing circumstances and that had this been known at the time of the decision, the burden of the increased rates should not have been imposed without deferment of some portion of the increases. The Commission agreed that this was a changed circumstance since December 1967 and that it required positive action by the bench.

The Commission, in its pronouncement, made the following decisions. The work value decisions of the Commission in December 1967 (*see* above) in regard to its amounts should stand. However it was decided that 70 per cent of the prescribed increases should be payable in accordance with the decision of 11 December and that 30 per cent should be deferred. But where the increase was $1.60 or less per week, the full amount should be paid without deferment, and where the increase was more than $1.60 the increase payable without deferment should be at least $1.60. The decision applied to increases granted to adult males and adult females. Adjustments to rates would be in multiples of 5 cents.

The bench of the Commission, which would deal with the economic wage case expected to commence on 6 August 1968, should decide when the deferred portion of the increases should be payable. The Commission again stated that the increases in wage rates in the Metal Trades Award did not set a pattern for wages in other awards. Benches dealing with work value cases in other awards were not bound in any way to follow what had happened in the Metal Trades Award. The Commission appealed to all in industry to co-operate with each other and with the Commission to make these decisions work and to end the industrial disputes and stoppages.

On 6 August 1968 the Commonwealth Conciliation and Arbitration Commission decided that the metal trades increases deferred by the February decision (*see* above) would become payable from the beginning of the first pay period commencing on or after 21 August 1968.

Commonwealth total wages

In the national wage cases of 1964 and 1965 applications by employers that basic wages and margins should be deleted from Commonwealth awards and total wages introduced were rejected by the Commonwealth Conciliation and Arbitration Commission. However, in its decisions in the Basic Wage, Margins and Total Wage Cases of 1966 the Commission decided to defer the conversion of the wage structure to the basis of a single wage pending further consideration of the present structure of marginal rates (*see* page 282) and further argument. As a result of the National Wage Cases of 1967, in which the employers again applied for a total wage, the Commonwealth Conciliation and Arbitration Commission announced the elimination of basic wages and margins from Commonwealth awards and the introduction of total wages. The total wages were arrived at by adding an amount of $1 a week to the weekly award wages for each adult male and adult female classification to operate from the beginning of the first pay-period to commence on or after 1 July 1967.

Trade unions unsuccessfully challenged in the High Court the abolition of basic wages and the adoption of total wages by the Commonwealth Commission.

On 4 October 1968 in its decision in the National Wage Case 1968 the Commonwealth Conciliation and Arbitration Commission increased all wage rates for adults (male and female) in Commonwealth awards by $1.35 a week. The minimum wage for adult males was increased by the same amount. Male and female juniors including apprentices received proportionate increases. The variations came into operation from the beginning of the first pay-period commencing on or after 25 October 1968.

Commonwealth minimum wage

In July 1966 the Commonwealth Conciliation and Arbitration Commission, in its decisions in the Basic Wage, Margins and Total Wage Cases of 1966, inserted in Commonwealth awards provisions for a minimum wage for adult males. The Commission said that it had given detailed consideration to lower paid classifications in the Metal Trades Award and had decided to grant some immediate relief to low wage earners. The Commission in its judgment said that it intended to insert a new provision in awards by which it would be prescribed that no adult male employee should be paid as a weekly wage for working the standard hours of work an amount less than the minimum wage, i.e. his appropriate basic wage rate plus $3.75 a week. The minimum wage was prescribed for adult male employees only and was applied for all purposes of the award, for example, in calculation of overtime and other penalty rates, piece-work, casual employment, sick leave and annual leave. The Commission stated that the provision for a minimum wage for adult male employees was designed to meet the circumstances of employees in the lowest classifications who were in receipt of award rates and no more. It was not intended to affect the wage of any employee who was already receiving the prescribed minimum through over-award payment. The provision for a minimum wage for adult males operated from the beginning of the first pay-period to commence on or after 11 July 1966. The rates of minimum wage for adult males inserted in Commonwealth awards ranged from $34.75 to $37.25 a week for capital cities. These rates were increased by $1 a week as a result of the decision of the Commonwealth Conciliation and Arbitration Commission in the National Wage Cases of 1967, the increases to operate from the beginning of the first pay-period commencing on or after 1 July 1967. Further increases of $1.35 a week operated from the beginning of the first pay-period commencing on or after 25 October 1968 as a result of the National Wage Case 1968.

Determination of wage rates in State awards, etc.

New South Wales

The first determination of a standard living wage for adult male employees under New South Wales State awards operated from 16 February 1914, when the Court of Arbitration fixed the rate at $4.80 a week for the metropolitan area. The first living wage for adult females ($3.00 a week) was declared by the Board of Trade to operate from 17 December 1918.

From 1926 to 1937 basic wage rates were determined by the Industrial Commission of New South Wales. From July 1927 a State scheme of child endowment became operative in New South Wales, and this continued until superseded by the Commonwealth Government scheme in July 1941.

From October 1937 to October 1955 the State adult male basic wage for Sydney was the same an the Commonwealth basic wage for Sydney. From the beginning of the first pay-period in November 1955 the State basic wage was automatically adjusted each quarter in accordance with movements in retail price index numbers. (Automatic adjustment of Commonwealth basic wages was discontinued in September 1953.) These automatic adjustments continued until October 1964, when legislation provided that the Commonwealth basic wage for Sydney should apply in State awards and industrial agreements to operate from the beginning of the first pay-period which commenced on or after 19 June 1964.

Between October 1937 and November 1950 the State adult female basic wage for Sydney was 54 per cent of the adult male rate. In December 1950 the adult female rate became 75 per cent of the adult male rate. From January 1963 for male and female employees performing work of the same or like nature and of equal value, the Industrial Commission may prescribe in State awards the same basic wage and secondary wage. In March 1967 the Industrial Commission in Court Session, when considering the adoption of Commonwealth marginal increases for State awards, stated that the general principle in future would be to inject Commonwealth wage increases on economic grounds into the State award structure.

Following the increase of $1 a week in total wages in Commonwealth awards in July 1967, the Industrial Commission increased award rates of wages and salaries for adult males and adult females by the addition of a fixed loading of $1 per week, described as 'July 1967 economic loading', to take effect from the beginning of the first pay period to commence on or after 1 July 1967. Subsequently legislation increased the basic wage for adult males from $33.50 to $34.50 per week and for adult females from $25.10 to $26.10 per week to operate from 1 January 1968. The increase of $1 per week in each basic wage absorbed the 'July 1967 economic loading', which was deleted from State awards and agreements. The legislation also provided for the adjustment of wage rates in State awards by the Industrial Commission subsequent to a decision of the Commonwealth Conciliation and Arbitration Commission to vary Commonwealth wage rates wholly or partly on economic grounds. Changes in the State basic wage for adult males shall not be more than the amount of increase in Commonwealth minimum wages for adult males, and the increase in the adult female basic wage not less than 75 per cent of the increase in the male basic wage. The Industrial Commission and Conciliation Committees were given power to include provisions for minimum wages for adult males or adult females in State awards.

The Industrial Commission of New South Wales increased the basic wages for adult males and adult females by $1.35 a week from the beginning of the first pay-period commencing on or after 25 October 1968. The weekly basic wage rates then became $35.85 for adult males and $27.45 for adult females.

Further information on New South Wales basic wages is published in previous issues of the Year Book and the annual *Labour Report*. State basic wage rates for Sydney are published in the Appendix to *Labour Report* No. 52, 1965 and 1966.

Victoria

In Victoria, Wages Boards constituted for each industry group or calling from representatives of employers and employees with an independent chairman determine rates of wage and conditions of work.

Except for the period November 1953 to August 1956, when automatic quarterly adjustments to the basic wage in Wages Board determinations operated, Wages Boards in determining wage rates had adopted Commonwealth basic wage rates. The basic wage rates of August 1956 continued to operate until June or July 1959 when the Commonwealth rates for Melbourne, determined as a result of the 1959 Basic Wage Inquiry, were incorporated into Wages Board determinations.

Subsequent to the decisions of the Commonwealth Conciliation and Arbitration Commission in the National Wage Cases of 1967 (*see* page 284), the Industrial Appeals Court decided that basic wages and margins for adult males and adult females should be deleted from Wages Board determinations and that wage rates expressed as total wages should operate from the beginning of the first pay-period in July 1967. At the same time total wages for both adult males and females were increased by $1 a week.

Total wages for both adult males and adult females in Wages Board determinations were further increased by $1.35 a week operative from the beginning of the first pay-period commencing on or after 25 October 1968.

For further information on basic wages in Victorian Wages Board determinations *see* previous issues of the Year Book and the annual *Labour Report*. Rates for adult males and adult females from November 1953 are published in the Appendix to *Labour Report* No. 52, 1965 and 1966.

Queensland

The first formal declaration of a basic wage in Queensland determined a basic wage of $8.50 for adult males and $4.30 for adult females to operate from 1 March 1921. Prior to this declaration the rate of $7.70 a week for adult males had been generally recognised in awards as the 'basic' or 'living' wage.

Since 1961 the full bench of the Industrial Conciliation and Arbitration Commission, consisting of not less than three Commissioners, has power to make declarations concerning the basic wage for males and females and the standard hours of work. The basic wage for adult males must be sufficient to maintain an employee, his wife, and family of three children in a fair and average standard of comfort. The basic wage for adult females should be not less than is sufficient to enable an employee to support herself in a fair and average standard of comfort. All persons interested must be given an opportunity to be heard before any general declaration regarding the basic wage is made, and the Commission must take into consideration any probable economic effect of such declaration. From 1 May 1961 the basic wage for adult females has been 75 per cent of the male rate.

In March 1965 the Commission stated that it had been decided as a matter of policy, that in the future, it did not propose to deal with an application to vary the basic wage solely because of a change in the Consumer Price Index, unless such a change warranted an alteration of 40 cents or more in the basic wage for adult males.

Following the decision of the Commonwealth Conciliation and Arbitration Commission to increase total wages by $1 a week in July 1967, the Industrial Commission increased all award rates of pay for both adult males and adult females by $1 per week to operate from 3 July 1967.

The Industrial Conciliation and Arbitration Commission decided on 25 October 1968 that the increase of $1.35 per week for adult males and adult females granted by the Commonwealth Conciliation and Arbitration Commission (*see* page 285) should flow to Queensland State awards, and that the increases should be added to basic wages and operate from 28 October 1968. The Commission also decided that the basic wage concept should be maintained and that the $1 increase granted to adult males and females in July 1967 should be absorbed in the basic wages.

The basic wage rates payable in the Southern Division (Eastern District) including Brisbane were $35.55 for adult males and $27.25 for adult females operative from 28 October 1968. For basic wages in other areas of the State district allowances are added to these rates (*see* previous issues of the Year Book and the annual *Labour Report*).

For further particulars of basic wage determination in Queensland see previous issues of the Year Book and the annual *Labour Report*. Tables of basic wages are published in the Appendix to *Labour Report* No. 52, 1965 and 1966.

South Australia

The first declaration of a living wage for adult male employees in the metropolitan area was $7.95 a week operative from 4 August 1921. The first adult female living wage of $3.50 a week operated from 1 September 1921.

Before July 1966 the Board of Industry had power to declare after public inquiry living wages to be paid to adult males and adult females. Since that date the power has been vested in the Industrial Commission constituted by the President and two Commissioners. However, the South Australian Industrial Code also provides for the declaration of living wages by proclamation to prevent unjustifiable differences between State and Commonwealth rates of wages. This latter method has been used in recent years to declare living wages.

The State living wage for adult males was the same as the Commonwealth basic wage for Adelaide from February 1950 to July 1967, when basic wages were deleted from Commonwealth awards and total wages introduced. The State living wage for adult females was the same as the Commonwealth basic wage for Adelaide from December 1950 to July 1967 and was 75 per cent of the adult male rate.

Following the increase of $1 a week in total wages in Commonwealth awards in July 1967 (*see* page 284), by proclamation the State living wages for both adult males and adult females were increased by $1 a week to operate from 3 July 1967. Further increases of $1.35 a week were proclaimed to operate from 28 October 1968. The rates then became $34.65 for adult males and $26.55 for adult females.

A minimum wage for adult males similar in concept to the Commonwealth award provisions of a minimum wage (*see* page 285) operates in South Australian State awards. From 28 October 1968 the rate prescribed was $38.40 a week.

For further information on South Australian living wages see previous issues of the Year Book and the annual *Labour Report*. Tables of living wages are published in the Appendix to *Labour Report* No. 52, 1965 and 1966.

Western Australia

The first declaration of the basic wage by the Court of Arbitration operated from 1 July 1926, when rates of $8.50 for adult males and $4.59 for adult females were fixed.

Before December 1966 the Western Australian Industrial Commission in Court Session consisting of three Commissioners (previously the Court of Arbitration) could declare a basic wage at any time on its own motion and must do so when requested by a majority of industrial unions or by the Western Australian Employers' Federation, with the limitation that no new determination should be made within twelve months of the preceding inquiry. Legislation also provided that the Commission (or the Court) might make adjustments to the basic wage each quarter after considering retail price index numbers.

From August 1931 to September 1964 separate basic wages were declared for three areas of the State, namely (a) the metropolitan area, (b) south-west land division, and (c) goldfields areas and other parts of the State. In September 1964, when the Commission increased the basic wage after an inquiry, one rate was declared for the whole of the State.

In December 1951 the basic wages for adult females became 65 per cent of the corresponding male rate, and in January 1960 this proportion was increased to 75 per cent. In each case marginal rates of pay for females were reduced or deleted to offset the increase in the female basic wage.

In December 1966 legislation provided that the Western Australian basic wage rates should be the same as the Commonwealth Six Capitals rates as soon as these exceeded the State rates ($33.50 a week for adult males and $25.13 a week for adult females) operative from 24 October 1966.

Following the decision of the Commonwealth Conciliation and Arbitration Commission to increase total wages by $1 a week from July 1967 (*see* page 284), the Industrial Commission made the following decisions. Wage rates for adult males not in receipt of the minimum weekly wage and for adult females were increased by 60 cents a week by way of a special loading. The minimum weekly wage for adult males (*see* page 285) payable under certain awards was increased from $36.55 to $37.55 a week. These increases operated from the beginning of the first pay-period commencing on or after 1 July 1967.

In October 1968 the Western Australian Industrial Commission decided upon application by trade unions, to increase by $1.35 a week the special loading of 60c (*see* above) payable to adult males and adult females, to operate from the beginning of the first pay-period commencing on or after 25 October 1968. At the same time the Commission increased the minimum wage for adult males from $37.55 to $38.90 a week.

Legislation operative from 22 November 1968 fixed the basic wage for adult males at $35.45 and for adult females at $27.08 a week. These new rates absorbed the special loading of $1.95 a week which was deleted from awards. The legislation also provided for the Commission to review the basic wage at least every twelve months, the variations in the basic wage to take effect only after the expiration of twelve months from the last variation unless there were special reasons.The Commission was also required, upon application, to insert in awards provision for equal pay for male and female workers performing work of the same or like nature and of equal value. If application for equal pay was made before 30 June 1970 the difference in male and female basic wages would be removed not later than 1 January 1972. The equal pay provisions do not apply to persons engaged in work essentially or usually performed by female workers but upon which males may be employed.

More detailed information on State basic wages in Western Australia appear in earlier issues of the Year Book and the annual *Labour Report*. Basic wage rates for the metropolitan area are published in the Appendix to *Labour Report* No. 52, 1965 and 1966.

Tasmania

Wages Boards are constituted for a number of industries from representatives of employers and employees with an independent chairman (common to all Wages Boards) with power to determine rates of wage in each industry.

Except for the period February 1956 to August 1956, when Wages Boards adjusted basic wages in accordance with movements in retail price index numbers, Wages Boards generally adopted Commonwealth basic wage rates. From August 1956 the basic wages in determinations remained unchanged until July 1959, when the rates were made the same as the Commonwealth basic wages.

In January 1961 Wages Boards adopted the basic wage for Hobart as the uniform rate applicable throughout the State. During 1962 a number of Wages Boards provided in their determinations for the automatic adoption of Commonwealth basic wages as and when they varied.

In July and August 1967, subsequent to the increase of $1 in total wages in Commonwealth awards, Wages Boards varied their determinations by increasing basic wages for adult males and adult females by $1 a week.

In November 1968 the Chairman of Wages Boards recommended a $1.35 increase in the basic wage for adult males and adult females in Wages Board determinations. The new basic wages operative from the beginning of the first pay-period commencing on or after 15 October 1968 became $35.75 a week for adult males and $27.40 for adult females. The increase also applied to the minimum wage for adult males (*see* page 285) which rose from $38.15 to $40.45 a week.

Further details of basic wages in Tasmanian Wages Board determinations are published in earlier issues of the Year Book and the annual *Labour Report*. Hobart basic wage rates adopted by Wages Boards from February 1956 are published in the Appendix to *Labour Report* No. 52, 1965 and 1966.

Annual leave

At present the majority of employees in Australia receive at least three weeks' paid annual leave. The following paragraphs outline the position under Commonwealth and State awards and industrial legislation.

Commonwealth

The first statement in the Commonwealth jurisdiction of the principles involved in deciding whether or not annual leave should be awarded was the judgment of the Commonwealth Conciliation and Arbitration Commission in the Commercial Printing Case of 1936, when one week's paid annual leave was granted. Over a period of time annual leave was introduced industry by industry when and if the Judge responsible for the industry considered it proper. In 1945 the Commission set out principles to be applied for the extension of paid annual leave to fourteen calendar days. Alteration of particular awards was left to the discretion of single Judges.

Since 1960 three inquiries have been held following union claims to increased paid annual leave from two to three weeks in Commonwealth awards. These were the Three Weeks' Annual Leave Inquiries of 1960, 1962, and 1963, reports of which appear in earlier issues of the Year Book and the annual *Labour Reports*.

In its judgment in the 1963 inquiry (*see* above), the Commonwealth Conciliation and Arbitration Commission said that it would implement its intention of granting three weeks' annual leave generally in secondary industry, subject to special cases. A period of twenty-one consecutive days' leave would be allowed to employees who had completed twelve months' continuous service by or after 20 November 1963.

New South Wales

Employees in New South Wales in private industry, other than those covered by Federal awards, were granted three weeks' annual leave by an amendment to the Annual Holidays Act passed in 1958. In 1964 the State Government granted its employees four weeks' annual leave effective from 1 January 1964. From 29 September 1964 annual holiday pay for employees covered by provisions of the Annual Holidays Act has been calculated on the basis of the employee's current weekly earnings instead of current award rates.

Victoria

Following the decision of the Commonwealth Conciliation and Arbitration Commission in 1963 (*see* above) individual Wages Boards commenced to alter provisions of their determinations to grant employees an extra week of leave. By September 1963 the majority of Boards had included three weeks' annual leave in their determinations.

Queensland

In June 1963 the Full Bench of the Industrial Conciliation and Arbitration Commission granted an extra week of annual leave to employees with twelve months' continuous service on or after 30 November 1963. This move implemented a previous decision of the Commission in which it was decided, as a matter of policy, to grant increased leave to persons already enjoying two weeks' leave.

The decision applied to day workers and non-continuous shift workers receiving two weeks' leave; continuous shift workers receiving three weeks' leave; and day workers and shift workers receiving additional leave in lieu of extra payment for working on statutory holidays. The order became effective as from 1 June 1963.

The terms of the decision of the Commonwealth Conciliation and Arbitration Commission, as handed down in 1963 (*see* above) were to apply to awards of the Industrial Conciliation and Arbitration Commission of Queensland with the exception that, in the State awards, *pro rata* payment for leave not taken at the termination of employment was to be expressed as hours per month. The decision did not apply to employees in primary industry—apart from the sugar industry—or those in western areas. Extra leave for these employees was granted as a result of separate applications.

South Australia

The Full Bench of the South Australian Industrial Court in May 1963 announced an increased standard of annual leave in the State, adopting three weeks as the standard as fixed by the Commonwealth Conciliation and Arbitration Commission (*see* above).

The Court, as a general indication as to its attitude, expressed the view that annual leave should be taken at a time fixed either by agreement or, if this is not possible, at a time fixed by the employer. The leave should be allowed in two parts and one part must be of at least two weeks' duration. These, however, were factors which could vary from award to award, and their determination would depend on the needs of the particular industry.

Western Australia

Following a general inquiry concerning Annual Leave and Public Holidays the Court of Arbitration in June 1963 adopted three weeks as the new standard for the normal period of annual leave in State awards, with four weeks for seven-day shift workers. The date of operation was the same as that decided by the Commonwealth Conciliation and Arbitration Commission (*see* above). Existing awards and agreements which already provided annual leave in excess of the Court's standard were to be examined separately to ascertain whether special circumstances existed to justify leave greater than the normal standard. The standard number of public holidays was retained at ten a year.

In November 1963 the Court refused an application by employers for the right to split the annual leave into two parts, since it decided to follow the decision of most other State tribunals and allow the additional leave in conformity with conditions similar to those prescribed by the Commonwealth Conciliation and Arbitration Commission. The right to split the leave would be allowed by the Court only in exceptional circumstances, unless all the parties concerned agreed to the inclusion of such a provision.

Tasmania

Following an amendment to the Wages Board Act in 1961, Wages Boards were permitted to grant employees up to three weeks' paid recreational leave. Between June 1962 and early 1963 determinations of Wages Boards were amended to provide for three weeks annual leave for employees, to operate from 1 January 1963.

Generally, most Wages Boards adopted provisions to enable leave to be taken in one consecutive period within six months from the end of the preceding year of employment or, if the employer and employee agree, in two separate periods, the lesser of which shall be of not less than seven consecutive days.

Long service leave

Paid long service leave, i.e. leave granted to workers who remain with the one employer over an extended period of time, has been included in the provisions of Commonwealth and State industrial legislation and industrial awards, and a brief summary is given in the following paragraphs. After fifteen years' continuous employment with the one employer, most employees in Australia are now entitled to at least thirteen weeks' paid long service leave. In all cases the transfer of ownership of a business does not constitute a break in continuity of service with the same employer.

Commonwealth

Until May 1964 the Commonwealth Conciliation and Arbitration Commission had not included provision for long service leave in its awards, and had refrained from determining disputes relating to this subject except in the case of the Northern Territory and the Australian Capital Territory (*see* below). Consequently, until then, the provisions of the various State Acts relating to long service leave applied to workers covered by awards of the Commonwealth. The applicability of long service leave provisions under State law to workers under Commonwealth awards had been tested before the High Court and the Privy Council, and such provisions had been held to be valid.

The Commission's position was set out in its decision, issued on 16 September 1959, regarding disputes on the inclusion, in the Graphic Arts (Interim) Award 1957, of provisions for long service leave. It stated that it should refrain until further order from determining the disputes so far as they concerned long service leave and that if in future the Commission decided that long service leave on a national basis was desirable, it was open to proceed to the making of an award on the matter.

Following the hearing of claims for long service leave provisions by employers in the graphic arts and metal trades industries in August 1963, the Full Bench of the Commonwealth Conciliation and Arbitration Commission on 11 May 1964 announced its decision that long service leave entitlement would be calculated on the basis of thirteen weeks for twenty years of unbroken employment, in respect of employment before 11 May 1964 (or, in New South Wales, 1 April 1963), and at the rate of thirteen weeks for fifteen years in respect of service after 11 May 1964 (or, in New South Wales, 1 April 1963). After further periods of ten years, employees would be entitled to an additional *pro rata* period of leave calculated on the same basis. Those employees who completed an unbroken contract of employment of ten years but less than fifteen years, and whose employment was terminated by death or by the employer for any cause other than serious and wilful misconduct, or by the employee on account of illness, incapacity or domestic or other pressing necessity, would be entitled to *pro rata* payment. The rate of payment while on leave would be current award rates which would be subject to basic wage changes and marginal adjustments which occurred during the leave period.

Following applications by employers in the metal trades and printing industries, the Full Bench of the Commission in a judgment delivered on 23 December 1964 extended the provisions of the awards to cover non-unionist employees. The decision rejected the unions' argument that the Commission had no jurisdiction to make long service leave awards binding in respect of non-unionists. The Commission, in a separate decision, varied the provisions of the award so that an employer would not be required to grant an employee long service leave until the entitlement equalled thirteen weeks for the first period of entitlement and eight and two-thirds weeks in respect of any subsequent period of entitlement. These variations would be effective on and from 1 December 1964.

Australian Territories. Long service leave codes for employees covered by Northern Territory and Australian Capital Territory awards were originally prescribed on 4 December 1961 by the Commonwealth Conciliation and Arbitration Commission in Presidential Session. The Commission decided that employees should be granted three months' long service leave after twenty years' service with one employer, even if part of this service was outside the Territory. In addition, the Australian Capital Territory code prescribed that employees presently employed might 'go back for a period of 25 years in regard to the calculation of their present or future entitlement of long service leave'. In December 1964 the Commission amended the majority of awards covering employees in the Northern Territory and the Australian Capital Territory by granting long service leave on the basis of thirteen weeks after fifteen years' service.

Stevedoring Industry. The *Stevedoring Industry Act* 1962, which came into force on 19 November 1962, amended the *Stevedoring Industry Act* 1956–1961 by extending the eligibility and qualifying periods of the long service leave provisions of the Act. No changes were made to the entitlement for long service leave, which remained at thirteen weeks after twenty years' qualifying service and six and a half weeks for each subsequent ten years' qualifying service. The *Stevedoring Industry Act* 1966, which operated from 29 October 1966, reduced the qualifying period for thirteen weeks leave from twenty years to fifteen years.

New South Wales

Long service leave was first introduced for the majority of workers by the Industrial Arbitration Act, 1951, which provided such leave for workers under State awards. This Act was replaced by the Long Service Leave Act, 1955, which extended the benefits to any worker within the State. An amendment to the Act in April 1963 provided for three months' long service leave for fifteen years' continuous service with the same employer and proportionate amounts on the same basis after a minimum of five years' service. The Long Service Leave (Metalliferous Mining Industry) Act, 1963 conferred on certain workers in the metalliferous mining industry the right to three months' long service leave after ten years' service. This Act operated from 1 January 1964.

Victoria

The *Factories and Shops (Long Service Leave) Act* 1953 first provided for long service leave for workers in Victoria, the provisions of this Act being subsequently incorporated in the Labour and Industry Act. Leave provided for was thirteen weeks for twenty years' continuous service with the same employer. Contributions by employers to retirement schemes were to be taken into consideration in dealing with exemptions from the Act.

An amendment to the Labour and Industry Act in December 1964 granted employees, from 1 January 1965, thirteen weeks' leave after fifteen years' continuous service. Workers who terminated their employment after ten years but less than the qualifying fifteen years would be able to obtain a *pro rata* entitlement subject to the existing special conditions of the Act. Following amendment to the Public Service Act in 1964, public servants became entitled to four and a half months' leave after fifteen years' service instead of six months after twenty years.

Queensland

In 1952 the Industrial Conciliation and Arbitration Acts were amended to include long service leave provision for employees within the jurisdiction of the Industrial Court, and the Acts were amended again in 1955 to extend these provisions to any employee in respect of whose employment there was not in force an award or industrial agreement under the Act and to seasonal workers in sugar mills and meat works. Leave provided for was thirteen weeks for twenty years' continuous service with the same employer.

An amendment to The Industrial Conciliation and Arbitration Acts was passed and assented to in December 1964, granting employees long service leave of thirteen weeks after fifteen years' continuous service. The amendment retained *pro rata* leave entitlement after ten years' service and operated on and from 11 May 1964.

South Australia

The Long Service Leave Act, 1967 provides for thirteen calendar weeks' leave after fifteen years' service with the same employer and for eight and two-thirds weeks' leave for each subsequent complete period of ten years' service. After seven and before fifteen completed years of service the worker is entitled on termination of employment to proportionate payment in lieu of leave for the period worked, except in certain specified circumstances. Entitlement for qualifying service prior to January 1966 is to be calculated at the rate of thirteen weeks' leave for twenty years' service, and an employer shall not be required to grant leave until the worker's total entitlement is thirteen weeks.

An employer may be exempted by the Industrial Commission from the leave entitlement provisions of the Act provided that the employees are entitled under some other scheme to long service leave benefits no less favourable than those provided by the Act.

Western Australia

The Long Service Leave Act was passed in 1958, but it did not apply to employees whose conditions of work were regulated under the Western Australian Industrial Arbitration Act. The Court of Arbitration of Western Australia in an order dated 1 April 1958 incorporated in most of the awards and agreements within its jurisdiction provisions similar to those in the Long Service Leave Act. Leave provided for was thirteen weeks for twenty years' continuous service with the same employer. Contributions by employers to retirement schemes can be taken into consideration in dealing with exemptions from the Act.

In September 1964 the Industrial Commission began to amend the long service leave provisions of its awards and industrial agreements to provide for thirteen weeks' leave after fifteen years' service on or from 1 October 1964. *Pro rata* entitlement would accrue after ten years' service. The *Long Service Leave Amendment Act (No. 2) 1964*, introduced in October 1964, was in the same terms as the amendments made by the Commission to the various awards and agreements.

Tasmania

The Long Service Leave Act, which was passed in 1956, provided for thirteen weeks' leave for twenty years' continuous service with the same employer. Contributions by employers to retirement schemes could be taken into consideration in dealing with exemptions from the Act. An amendment to the Long Service Leave Act, assented to on 17 December 1964, granted thirteen weeks' leave after fifteen years' continuous service. The amendment operated on and from 11 May 1964.

INDUSTRIAL DISPUTES

Detailed information regarding industrial disputes involving stoppage of work is given in the *Labour Report*. A table showing statistics of industrial disputes for each year from 1913 is contained in the Appendix to *Labour Report* No. 52, 1965 and 1966.

Particulars of all disputes in progress during the year are included in the annual figures, whether the dispute commenced in that year or was in progress at the beginning of the year. Consequently, details of 'the number of disputes' and 'workers involved' in disputes which commenced in any year, and were still in progress during the following year, are included in the figures for both years.

The following table gives, for Australia as a whole, particulars of industrial disputes which were in progress during 1968, classified according to industry groups.

INDUSTRIAL DISPUTES(*a*): INDUSTRY GROUPS, AUSTRALIA, 1968

Industry group	*Number*	*Workers involved*			*Working days lost*	*Estimated loss in wages ($'000)*
		Directly	*Indirectly (b)*	*Total*		
Agriculture, grazing, etc.	..	..	..	..	..	..
Coal mining	205	46,226	..	46,226	61,080	701.6
Other mining and quarrying	32	9,214	2,211	11,425	67,678	1,140.5
Engineering, metals, vehicles, etc.	455	263,242	8,506	271,748	423,520	4,558.9
Textiles, clothing and footwear	3	369	99	468	887	8.7
Food, drink and tobacco	128	24,050	5,474	29,524	43,823	436.0
Sawmilling, furniture, etc.	3	180	..	180	215	1.9
Paper, printing, etc.	30	13,979	160	14,139	18,123	216.2
Other manufacturing	149	34,794	1,115	35,909	67,245	779.5
Building and construction	235	80,714	407	81,121	119,538	1,478.9
Railway and tramway services	33	44,564	1,155	45,719	67,719	623.3
Road and air transport	52	4,236	254	4,490	7,641	120.0
Shipping	16	1,207	24	1,231	1,663	17.2
Stevedoring	298	105,632	..	105,632	77,303	797.5
Amusement, hotels, personal service, etc.	26	2,534	89	2,623	4,539	31.0
Other industries(*c*)	48	69,883	3	69,886	118,490	1,204.2
Total	**1,713**	**700,824**	**19,497**	**720,321**	**1,079,464**	**12,115.2**

(*a*) Refers only to disputes involving a stoppage of work of ten man-days or more. (*b*) Persons thrown out of work at the establishments where the stoppages occurred but not themselves parties to the dispute. (*c*) Includes communication; finance and property; wholesale and retail trade; public authority (n.e.i.); and community and business services.

A graph on plate 26, page 293 shows, for the years 1955 to 1968, the working days lost as a result of industrial disputes in the main industry groups.

The following table gives particulars of the number of industrial disputes in each State and Territory, together with the number of workers involved and the losses in working days and wages caused by disputes which were current during each of the years 1964 to 1968.

1955 TO 1968

WORKING DAYS LOST—INDUSTRY GROUPS

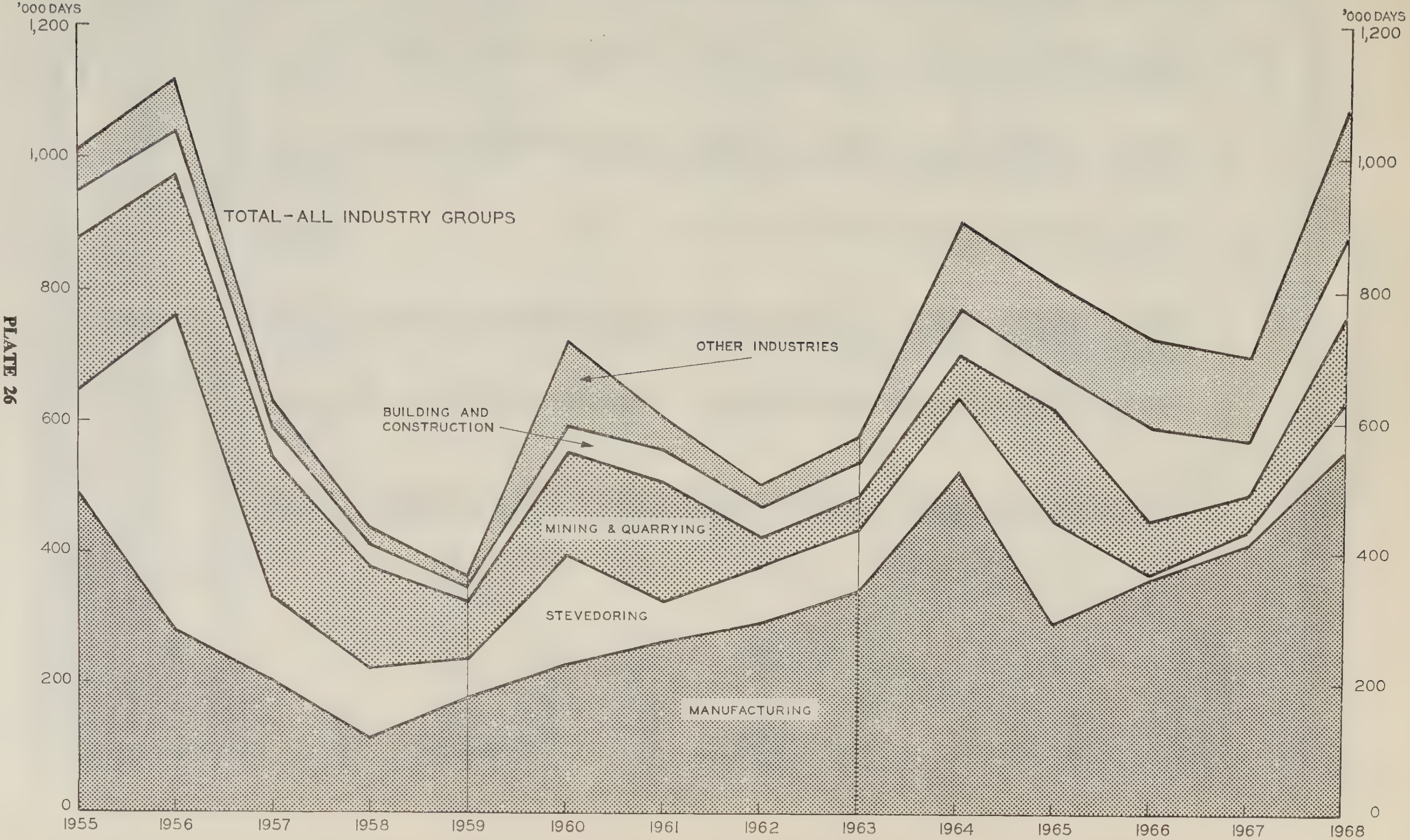

PLATE 26

INDUSTRIAL DISPUTES(*a*): STATES AND TERRITORIES, 1964 TO 1968

			Workers involved				
State or Territory	*Year*	*Number*	*Directly*	*Indirectly (b)*	*Total*	*Working days lost*	*Estimated loss in wages ($'000)*
New South Wales	1964	828	221,510	7,566	229,076	320,568	2,996.2
	1965	832	244,900	6,156	251,056	367,942	3,479.1
	1966	835	203,701	6,315	210,016	400,111	4,026.0
	1967	836	311,209	9,032	320,241	468,034	4,804.6
	1968	965	345,015	10,464	355,479	583,406	6,653.5
Victoria	1964	206	188,836	1,239	190,075	359,567	3,428.2
	1965	208	118,534	3,264	121,798	214,300	2,061.6
	1966	179	99,625	1,865	101,490	219,605	2,097.2
	1967	212	83,225	1,296	84,521	107,312	1,106.6
	1968	327	169,272	3,531	172,803	243,924	2,731.3
Queensland	1964	198	84,951	7,745	92,696	157,571	1,453.3
	1965	186	48,328	5,241	53,569	189,941	2,221.2
	1966	171	67,109	1,622	68,731	80,692	860.8
	1967	159	45,616	635	46,251	88,186	886.7
	1968	193	116,706	3,474	120,180	158,615	1,701.2
South Australia	1964	55	22,851	189	23,040	62,785	585.2
	1965	48	28,323	143	28,466	26,379	253.3
	1966	42	8,697	63	8,760	20,903	199.7
	1967	55	17,351	96	17,447	18,691	199.0
	1968	83	38,011	1,407	39,418	51,082	514.6
Western Australia	1964	26	6,093	72	6,165	7,148	62.6
	1965	33	12,611	..	12,611	10,020	100.8
	1966	25	2,860	16	2,876	6,239	64.5
	1967	26	5,032	39	5,071	5,994	62.6
	1968	70	18,323	361	18,684	21,762	281.8
Tasmania	1964	8	1,898	..	1,898	1,939	18.0
	1965	17	5,131	..	5,131	3,894	41.4
	1966	14	2,541	..	2,541	3,119	34.8
	1967	29	6,200	7	6,207	7,290	82.3
	1968	28	7,507	260	7,767	13,037	149.0
Northern Territory	1964	6	602	..	602	437	4.3
	1965	17	1,742	6	1,748	2,784	35.0
	1966	4	259	..	259	1,211	17.3
	1967	16	2,679	..	2,679	9,055	113.7
	1968	37	3,710	..	3,710	4,623	50.2
Australian Capital Territory	1964	7	2,076	..	2,076	1,343	13.1
	1965	5	665	..	665	609	6.2
	1966	3	178	..	178	204	2.2
	1967	7	857	..	857	753	7.5
	1968	10	2,280	..	2,280	3,015	33.7
Australia	1964	1,334	528,817	16,811	545,628	911,358	8,560.9
	1965	1,346	460,234	14,810	475,044	815,869	8,198.5
	1966	1,273	384,970	9,881	394,851	732,084	7,302.5
	1967	1,340	472,169	11,105	483,274	705,315	7,263.1
	1968	1,713	700,824	19,497	720,321	1,079,464	12,115.2

(*a*) Refers only to disputes involving a stoppage of work of ten man-days or more. (*b*) Persons thrown out of work at the establishments where the stoppage occurred but not themselves parties to the dispute.

Duration of disputes

The duration of each industrial dispute involving a loss of work, i.e. the time between the cessation and resumption of work, has been calculated in working days, exclusive of Saturdays, Sundays and holidays, except where the establishment involved carries on a continuous process (e.g. metal smelting and cement manufacture).

The following table shows, for the year 1968, industrial disputes in coal mining, stevedoring and other industries classified according to duration.

INDUSTRIAL DISPUTES(*a*): DURATION, BY INDUSTRY GROUP, AUSTRALIA, 1968

Duration (working days)	*Number*	*Workers involved(b)*		*Working days lost*		*Estimated loss in wages ($'000)*
		Number	*Proportion of total (per cent)*	*Number*	*Proportion of total (per cent)*	
COAL MINING						
1 day and less	130	22,581	48.8	18,634	30.5	204.5
2 days and more than 1 day . .	40	18,849	40.8	27,707	45.4	313.5
3 days and more than 2 days . .	20	2,865	6.2	7,424	12.2	82.4
Over 3 days and less than 5 days .	13	1,554	3.4	5,355	8.8	57.7
5 days and less than 10 days . .	2	377	0.8	1,960	3.2	43.5
10 days and less than 20 days . .	..	..	..	..	..	..
20 days and less than 40 days . .	..	..	..	..	..	..
40 days and over	..	..	..	..	..	..
Total	*205*	*46,226*	*100.0*	*61,080*	*100.0*	*701.6*
STEVEDORING						
1 day and less	266	88,018	83.3	43,231	55.9	449.1
2 days and more than 1 day . .	19	14,213	13.5	24,160	31.3	246.1
3 days and more than 2 days . .	9	2,996	2.8	8,060	10.4	83.7
Over 3 days and less than 5 days .	3	307	0.3	1,102	1.4	11.0
5 days and less than 10 days . .	1	98	0.1	750	1.0	7.6
10 days and less than 20 days . .	..	..	..	..	..	..
20 days and less than 40 days . .	..	..	..	..	..	..
40 days and over	..	..	..	..	..	..
Total	*298*	*105,632*	*100.0*	*77,303*	*100.0*	*797.5*
OTHER INDUSTRIES						
1 day and less	522	270,764	47.6	182,998	19.4	2,010.2
2 days and more than 1 day . .	257	214,794	37.8	314,893	33.5	3,444.9
3 days and more than 2 days . .	147	25,625	4.5	66,462	7.1	718.5
Over 3 days and less than 5 days .	131	23,441	4.1	84,557	9.0	901.9
5 days and less than 10 days . .	112	14,764	2.6	89,514	9.5	1,052.8
10 days and less than 20 days . .	33	16,507	2.9	157,276	16.7	1,968.3
20 days and less than 40 days . .	8	2,568	0.5	45,381	4.8	519.6
40 days and over	..	..	..	..	..	..
Total	*1,210*	*568,463*	*100.0*	*941,081*	*100.0*	*10,616.2*
ALL INDUSTRIES						
1 day and less	918	381,363	52.9	244,863	22.7	2,663.8
2 days and more than 1 day . .	316	247,856	34.4	366,760	34.0	4,004.5
3 days and more than 2 days . .	176	31,486	4.4	81,946	7.6	884.6
Over 3 days and less than 5 days .	147	25,302	3.5	91,014	8.4	970.6
5 days and less than 10 days . .	115	15,239	2.1	92,224	8.5	1,103.9
10 days and less than 20 days . .	33	16,507	2.3	157,276	14.6	1,968.3
20 days and less than 40 days . .	8	2,568	0.4	45,381	4.2	519.6
40 days and over	..	..	..	..	..	..
Grand total	**1,713**	**720,321**	**100.0**	**1,079,464**	**100.0**	**12,115.2**

(*a*) Refers only to disputes involving a stoppage of work of ten man-days or more. (*b*) Includes workers indirectly involved. *See* footnote (*b*) to table on page 294.

Causes of disputes

Stoppages are analysed in three separate groups, 'Coal mining', 'Stevedoring', and 'Other industries'. Causes have been grouped under four main headings: (1) Wages, hours and leave; (2) Physical working conditions and managerial policy; (3) Trade unionism; (4) Other causes. The first group is restricted to disputes involving general principles relating to wages, hours and leave; minor questions regarding the claims to pay or leave by individual employees are included under managerial policy. The second group comprises disputes regarding physical working conditions and general questions of managerial policy, including disciplinary action, the promotion of employees, the employment of particular individuals, personal disagreements between employees and supervisory staff, and disputes arising from the computation of wages, leave, etc., in individual cases. The third group includes stoppages over employment of non-unionists, inter-union and intra-union disputes, disputes over recognition of union activities, and sympathy stoppages in support of employees in another industry. The last group comprises disputes by way of protest against situations not arising from the usual relationship of employer and employee, e.g. political matters, and cases (occurring mainly in the coal mining industry) where the cause of the stoppage is not officially made known to the management.

The following tables show particulars of industrial disputes classified according to cause, in three industry groups for 1968, and according to cause for the years 1964 to 1968.

INDUSTRIAL DISPUTES(*a*): CAUSES, INDUSTRY GROUPS, AUSTRALIA, 1968

Cause of dispute	*Coal mining*	*Stevedoring*	*Other industries*	*All industries*
Number of disputes—				
Wages, hours and leave	15	34	495	544
Physical working conditions and managerial policy	121	236	581	938
Trade unionism	17	12	89	118
Other	52	16	45	113
Total disputes	*205*	*298*	*1,210*	*1,713*
Workers involved(*b*)—				
Wages, hours and leave	3,544	34,644	422,615	460,803
Physical working conditions and managerial policy	28,805	55,199	115,193	199,197
Trade unionism	1,967	3,130	13,906	19,003
Other	11,910	12,659	16,749	41,318
Total workers involved	*46,226*	*105,632*	*568,463*	*720,321*
Working days lost—				
Wages, hours and leave	4,769	32,053	670,141	706,963
Physical working conditions and managerial policy	40,663	37,236	236,977	314,876
Trade unionism	3,035	3,759	20,048	26,842
Other	12,613	4,255	13,915	30,783
Total working days lost	*61,080*	*77,303*	*941,081*	*1,079,464*

(*a*) Refers only to disputes involving a stoppage of work of ten man-days or more. (*b*) Includes workers indirectly involved. *See* footnote (*b*) to table on page 294.

INDUSTRIAL DISPUTES(*a*): CAUSES, AUSTRALIA, 1964 TO 1968

Cause of dispute	*1964*	*1965*	*1966*	*1967*	*1968*
Number of disputes—					
Wages, hours and leave	320	426	325	336	544
Physical working conditions and managerial policy	758	735	714	772	938
Trade unionism	136	101	143	129	118
Other	120	84	91	103	113
Total disputes	*1,334*	*1,346*	*1,273*	*1,340*	*1,713*
Workers involved(*b*)—					
Wages, hours and leave	235,846	268,105	205,613	175,911	460,803
Physical working conditions and managerial policy	191,354	143,111	125,286	130,105	199,197
Trade unionism	31,670	17,722	22,393	17,840	19,003
Other	86,758	46,106	41,559	159,418	41,318
Total workers involved	*545,628*	*475,044*	*394,851*	*483,274*	*720,321*
Working days lost—					
Wages, hours and leave	556,948	528,722	392,458	255,855	706,963
Physical working conditions and managerial policy	257,062	235,542	269,875	299,589	314,876
Trade unionism	33,392	18,873	32,885	26,710	26,842
Other	63,956	32,732	36,866	123,161	30,783
Total working days lost	*911,358*	*815,869*	*732,084*	*705,315*	*1,079,464*

(*a*) Refers only to disputes involving a stoppage of work of ten man-days or more. (*b*) Includes workers indirectly involved. *See* footnote (*b*) to table on page 294.

Methods of settlement of disputes

The following table shows particulars of industrial disputes for 1968, classified according to method of settlement, in three industry groups.

INDUSTRIAL DISPUTES(*a*): METHODS OF SETTLEMENT, INDUSTRY GROUPS AUSTRALIA, 1968

Method of settlement	*Coal mining*	*Stevedoring*	*Other industries*	*All industries*
NUMBER OF DISPUTES				
By private negotiation	47	16	368	431
By mediation not based on legislation	..	..	6	6
State legislation—				
Under State Conciliation, etc. legislation	..	2	165	167
By reference to State Government officials	1	..	..	1
Commonwealth and Commonwealth-State legislation—				
Industrial Tribunals under—				
Conciliation and Arbitration Act	..	..	184	184
Coal Industry Acts	12	..	..	12
Stevedoring Industry Act	..	14	..	14
Other Acts	..	..	..	..
By reference to Commonwealth Government officials	..	69	1	70
By filling places of workers on strike or locked out	..	..	..	..
By closing down establishment permanently	..	..	..	..
By resumption without negotiation	145	197	486	828
By other methods	..	..	..	..
Total	**205**	**298**	**1,210**	**1,713**

For footnotes *see* next page.

INDUSTRIAL DISPUTES(*a*): METHODS OF SETTLEMENT, INDUSTRY GROUPS
AUSTRALIA, 1968—*continued*

Method of settlement	*Coal mining*	*Stevedoring*	*Other industries*	*All industries*
WORKERS INVOLVED(*b*)				
By private negotiation	5,600	1,534	80,502	87,636
By mediation not based on legislation	..	..	1,182	1,182
State legislation—				
Under State Conciliation, etc. legislation	..	106	26,636	26,742
By reference to State Government officials	109	..	..	109
Commonwealth and Commonwealth-State legislation—				
Industrial Tribunals under—				
Conciliation and Arbitration Act	..	..	29,369	29,369
Coal Industry Acts	1,525	..	..	1,525
Stevedoring Industry Act	..	1,435	..	1,435
Other Acts	..	..	..	..
By reference to Commonwealth Government officials	..	5,940	6,086	12,026
By filling places of workers on strike or locked out	..	..	..	..
By closing down establishment permanently	..	..	..	..
By resumption without negotiation	38,992	96,617	424,688	560,297
By other methods	..	..	..	..
Total	**46,226**	**105,632**	**568,463**	**720,321**
WORKING DAYS LOST				
By private negotiation	8,813	671	181,368	190,852
By mediation not based on legislation	..	..	2,865	2,865
State legislation—				
Under State Conciliation, etc. legislation	..	197	59,717	59,914
By reference to State Government officials	279	..	..	279
Commonwealth and Commonwealth-State legislation—				
Industrial Tribunals under—				
Conciliation and Arbitration Act	..	..	127,920	127,920
Coal Industry Acts	4,065	..	..	4,065
Stevedoring Industry Act	..	2,571	..	2,571
Other Acts	..	..	..	..
By reference to Commonwealth Government officials	..	5,031	17,320	22,351
By filling places of workers on strike or locked out	..	..	..	..
By closing down establishment permanently	..	..	..	..
By resumption without negotiation	47,923	68,833	551,891	668,647
By other methods	..	..	..	..
Total	**61,080**	**77,303**	**941,081**	**1,079,464**

(*a*) Refers only to disputes involving a stoppage of work of ten man-days or more. (*b*) Includes workers indirectly involved. *See* footnote (*b*) to table on page 294.

WORKERS' COMPENSATION LEGISLATION

A conspectus of the principal provisions of Workers' Compensation Acts and Ordinances in force in Australia at 31 December 1966 is included in *Labour Report* No. 52, pages 231–43.

LABOUR ORGANISATIONS

Labour organisations in Australia

The figures shown in this section are prepared from a special collection of membership of labour organisations at 31 December each year. The affairs of single unions are not disclosed in the published results and this has assisted in securing complete information. The Bureau is indebted to the secretaries of trade unions for their co-operation in supplying information. More detailed statistics appear in the annual *Labour Report*.

Trade unions

The trade unions in Australia are very diverse in character, and range from the small independent association to the large interstate organisation, which, in its turn, may be a branch of an international body. Broadly speaking, there are four distinct classes of labour organisations: (*a*) the local independent, (*b*) the State, (*c*) the interstate, and (*d*) the Australasian or international; but a number of variations occur from each of these classes. The schemes of organisation of interstate or federated unions vary greatly in character. In some unions the State organisations are bound together under a system of unification with centralised control, while in others the State units are practically independent and self-governing, the federal bond being loose and existing only for one or two specified purposes. Statistics relating to interstate or federated trade unions are shown in a table on page 301.

Returns showing membership by States and Territories at 31 December each year are obtained for all trade unions and employee organisations. The following table shows the position at the end of each of the years 1966 to 1968.

TRADE UNIONS: NUMBER AND MEMBERSHIP, STATES AND TERRITORIES 1966 TO 1968

	Number of separate unions			*Number of members ('000)*			*Percentage increase in membership(a)*		
State or Territory	*1966*	*1967*	*1968*	*1966*	*1967*	*1968*	*1966*	*1967*	*1968*
New South Wales	220	213	210	817.3	832.8	861.5	−1.0	1.9	3.4
Victoria	154	152	153	539.4	545.5	550.7	0.3	1.1	1.0
Queensland	140	138	135	351.6	344.0	334.1	−0.5	−2.2	−2.9
South Australia	136	133	133	178.5	182.2	185.6	2.6	2.1	1.9
Western Australia	157	155	157	146.6	152.3	160.9	5.3	3.9	5.6
Tasmania	110	107	111	65.5	68.1	68.2	3.3	4.0	0.1
Northern Territory(*b*)	38	40	39	4.1	4.5	5.6	(*b*)	(*b*)	(*b*)
Australian Capital Territory(*b*)	66	65	70	20.7	22.0	24.1	(*b*)	(*b*)	(*b*)
Australia	(*c*) **330**	(*c*) **324**	(*c*) **319**	**2,123.5**	**2,151.3**	**2,190.7**	**0.3**	**1.3**	**1.8**

(*a*) On preceding year. (*b*) In some cases union members in the Territories associated with State organisations are reported under the heading of that State. The annual figures reflect, in part, more accurate reporting, and the comparability of totals for the Territories is affected by this aspect. (*c*) Without interstate duplication. *See* below.

Minus sign (−) denotes decrease.

In the preceding table, under the heading 'Number of separate unions', a union reporting members in a State or Territory is counted as one union within that State or Territory. The figures do not add to the Australian total (shown in the last line) because a union represented in more than one State or Territory is included in the figure for each State or Territory in which it is represented, but is counted only once in the Australian total.

A table showing the number and membership of trade unions in Australia for the years 1912 to 1966 is included in Appendix XII to *Labour Report* No. 52.

The following table shows the number of unions and members thereof in Australia at the end of each of the years 1966 to 1968 classified according to industry group. The table does not supply a precise classification of trade union members by industry, because where the members of a union are employed in a number of industries they have been classified to the predominant industry for the union concerned.

TRADE UNIONS: INDUSTRY GROUPS, AUSTRALIA, 1966 TO 1968

Industry group	*1966*		*1967*		*1968*	
	No. of unions (a)	*No. of members*	*No. of unions (a)*	*No. of members*	*No. of unions (a)*	*No. of members*
		'000		'000		'000
Agriculture, grazing, etc.	3	61.3	3	60.4	3	58.5
Mining and quarrying	12	35.7	12	34.5	12	34.5
Manufacturing—						
Engineering, metals, vehicles, etc.	10	331.8	9	343.1	9	352.4
Textiles, clothing and footwear	6	107.8	6	109.6	5	107.3
Food, drink and tobacco	32	134.5	32	133.4	31	125.9
Sawmilling, furniture, etc.	6	38.9	6	34.9	6	34.7
Paper, printing, etc.	5	54.8	5	57.5	5	59.2
Other manufacturing	27	94.7	25	85.3	22	87.6
All manufacturing groups	*86*	*762.4*	*83*	*763.7*	*78*	*767.1*
Building and construction	24	143.5	24	142.6	23	145.5
Railway and tramway services	24	129.3	24	126.0	22	124.3
Road and air transport	11	72.9	11	75.0	11	77.5
Shipping and stevedoring	13	33.9	13	32.9	13	32.0
Banking, insurance and clerical	15	142.8	15	146.8	15	147.0
Wholesale and retail trade	12	86.5	11	84.7	11	89.7
Public administration(*b*)	71	413.5	70	423.0	71	436.6
Amusement, hotels, personal service, etc.	22	55.8	21	56.5	21	58.6
Other industries(*c*)	37	186.0	37	205.3	39	219.3
Total	**330**	**2,123.5**	**324**	**2,151.3**	**319**	**2,190.7**

(*a*) Without interstate duplication. *See* page 299. (*b*) Includes communication, municipal, etc. (*c*) Includes community and business services.

Number of trade union members and proportion of wage and salary earners. The following table shows the estimated percentages of wage and salary earners in employment who are members of trade unions. As estimates of wage and salary earners in employment do not include employees engaged in rural industry or in private domestic service, the percentages have been calculated on figures obtained by adding to the end of year estimates the number of employees in rural industry and in private domestic service recorded at the nearest available population census. For this reason, and also because the membership of trade unions includes some persons not in employment, the percentages shown in the table must be regarded as approximations.

TRADE UNIONS: NUMBER OF MEMBERS AND PROPORTION OF TOTAL WAGE AND SALARY EARNERS, AUSTRALIA, 1954 TO 1968

Year	*Number of members ('000)*			*Proportion of total wage and salary earners(a) (Per cent)*		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*
1954	1,448.2	339.3	1,787.5	66	45	61
1961	1,521.9	372.7	1,894.6	63	41	57
1966	1,657.5	466.0	2,123.5	60	40	54
1967	1,663.7	487.6	2,151.3	59	40	54
1968	1,691.1	499.5	2,190.7	59	40	53

(*a*) *See* text above.

Interstate or federated trade unions. The following table gives particulars of the number and membership of interstate or federated trade unions in 1968.

INTERSTATE OR FEDERATED TRADE UNIONS(*a*): AUSTRALIA, 1968

	Unions operating in—					
	2 States	*3 States*	*4 States*	*5 States*	*6 States*	*Total*
Number of unions . .	11	5	18	26	81	141
„ „ members ('000) .	21.9	21.8	152.5	326.1	1,474.4	1,996.7

(*a*) Certain unions in this group have, in addition to branches in the States, branches in the Northern Territory or the Australian Capital Territory or both.

Organisations registered under the (Commonwealth) Conciliation and Arbitration Act

Under Part VIII. of the *Conciliation and Arbitration Act* 1904–1968 any association of employers in an industry who have, or any employer who has, employed, on an average taken per month, not less than 100 employees during the six months preceding application for registration, and any association of not less than 100 employees in any industry, may be registered. However, the Public Service Arbitration Act provides that an association of less than 100 employees may be registered as an organisation under the Conciliation and Arbitration Act if its members comprise at least three-fifths of all persons engaged in that industry in the Public Service. Such organisations are included in the following figures. Registered unions include both interstate associations and associations operating within one State only. Registration under Commonwealth legislation began in 1906. At the end of 1968 the number of employers' organisations registered under the provisions of the Act was 74. The number of unions registered at the end of 1968 was 147, with membership of 1,836,000, representing 84 per cent of the total membership of all trade unions in Australia. Lists of organisations of employees and of employers registered under this Act are contained in the *Industrial Information Bulletin*, Vol. 24, No. 1, January 1969 published by the Department of Labour and National Service.

Central labour organisations

Trades and Labour Councils. Delegate organisations, usually known as Trades Hall Councils or Labour Councils and consisting of representatives of a number of trade unions, have been established in the capital cities and in a number of other centres in each State. In the centres where these councils exist most unions or local branches operating in the district are affiliated. The district councils obtain their finance by means of a *per capita* tax on members of affiliated unions. In States other than Western Australia the district councils are generally independent bodies, although provision usually exists in the rules of the central council in the capital city for the organisation of district councils, or for their representation on the central council. In Western Australia there was until 1962 a unified system or organisation with a central council and district councils within the framework of the Australian Labor Party. In 1962 this organisation was abolished and a separate Trades and Labour Council, with provincial councils, was to be established outside the political organisation. At the end of 1963 only the central council (the Trades and Labour Council of Western Australia) was operating, but a number of provincial councils were established from 1946.

The following table shows, for each State and Territory, the number of trades and labour councils and the number of affiliated unions or branches of unions at the end of 1968. The figures for the number of unions do not necessarily represent separate unions, since the branches of a large union may be affiliated with the local trades councils in the several towns in which they are represented.

CENTRAL LABOUR ORGANISATIONS: NUMBER, AND UNIONS AND BRANCH UNIONS AFFILIATED, STATES AND TERRITORIES, 1968

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A. (a)*	*Tas.*	*N.T.*	*A.C.T.*	*Total*
Number of councils .	11	9	13	5	4	5	. .	1	28
Number of unions and branch unions affiliated	336	277	185	153	151	134	. .	28	1,264

(*a*) *See* explanation in text above.

As well as trades and labour councils there are councils organised on trade lines and composed of delegates from separate unions whose members' interests are closely connected by reason of their occupations. Delegate councils of bakers, bread carters and mill employees, or of unions connected directly or indirectly with the metal trades, or with the building trades, are examples of such organisations.

Australian Council of Trade Unions. A central labour organisation, now called the Australian Council of Trade Unions, came into being during 1927. The Council was created to function on behalf of the trade unions of Australia, and was founded at an All-Australian Trade Union Congress held in Melbourne in May 1927. The A.C.T.U. consists of affiliated unions and affiliated Metropolitan and or State Labour Councils and Provincial Councils. The Metropolitan or State Labour Council in each State is the State Branch of the A.C.T.U. and has the right to appoint one representative to act on the executive of the Council. In addition to the representatives of the State Branches of the A.C.T.U., six delegates are elected by and from Congress, one from each of the following industry groups: Building, Food and distributive services, Manufacturing, Metal, Services, and Transport. To this executive are added the four officers, namely, President, two Vice-Presidents, and Secretary, who are elected by and from the Australian Congress of Trade Unions.

The ordinary meetings of Congress are held in alternate years. The 1967 Biennial Congress was held in August 1967, and was attended by 656 delegates from affiliated organisations, State branches of the A.C.T.U., and provincial councils. Special meetings of Congress are held whenever deemed advisable by decision of the executive, as approved by the majority of its branches, or by resolution of unions representing one-third of the total membership of the A.C.T.U.

The objectives of the A.C.T.U. are the socialisation of industry, i.e. production, distribution and exchange, and the utilisation of the resources of Australia for the benefit of the people—ensuring full employment, with rising standards of living, real security, and full cultural opportunities for all. The methods to be adopted are: the closer organisation of the workers by the transformation of the Australian trade union movement from the craft to an industrial basis, by grouping of unions in their respective industries and by the establishment of one union in each industry; the consolidation of the Australian labour movement with the object of unified control, administration, and action; the centralised control of industrial disputes, educational propaganda among unions; and political action to secure satisfactory working-class legislation.

The A.C.T.U. was the first interstate body in Australia with authority to deal with industrial matters of an interstate character affecting the trade union movement generally. It is also the body responsible for submitting to the Commonwealth Government the names of persons suitable for selection as the Australian workers' delegate to the annual International Labour Conference.

International Labour Organisation

The International Labour Organisation (I.L.O.) was established on 11 April 1919 as an autonomous institution associated with the League of Nations. Its original constitution was adopted as Part XIII of the Treaty of Versailles and formed part of other treaties of peace. During the years between its establishment and the outbreak of the 1939–45 War the I.L.O., with headquarters at Geneva, played a leading role in promoting the improvement of labour conditions throughout the world.

In 1940, in order to ensure that the I.L.O. should be able to continue to function freely, a working centre was established at Montreal, Canada. In 1946 the Organisation became the first of the specialised agencies of the United Nations. Under the terms of agreement the United Nations recognises the I.L.O. as a specialised agency having responsibility in the field defined by its constitution, which embraces labour conditions, industrial relations, employment organisations, social security and other aspects of social policy. The Organisation has three basic parts. These are the International Labour Conference, its highest authority, which as a rule meets annually; the Governing Body, its executive council, which usually meets three times each year; and the International Labour Office, which provides the secretariat of the Organisation. The Conference is composed of delegations from the Member States of the Organisation. At the end of 1968 there were 118 Member States, each of which is entitled to be represented by four delegates—two government, one representing employers and one representing workers together with their advisers. Each delegate speaks and votes independently, so that all points of view in each country are fully expressed. The Governing Body consists of the representatives of twenty-four governments and twelve employers' and twelve workers' representatives. Of the twenty-four government representatives, ten are from the ten countries of major industrial importance and fourteen are elected by the remaining governments. These latter fourteen government representatives and the twelve employers' and twelve workers' titular delegates and the deputy members of the three groups are elected by their groups at the Conference every three years. Particulars are given in *Labour Report* No. 52 of the proceedings of International Labour Conferences up to the 50th Session, held in Geneva in June 1966. For details of I.L.O. conventions ratified by Australia, *see Labour Report* No. 52, pages 254–5.

CHAPTER 11

OVERSEAS TRANSACTIONS

This chapter includes statistics of overseas trade, balance of payments, and overseas investment by private investors, but because of limitations of space the statistics are, in the main, restricted to summarised form. For detailed information *see* the *Annual Bulletin of Overseas Investment, Australia;* and the other annual bulletins *Overseas Trade* (preliminary and final), *Australian Exports, Australian Imports, Imports Cleared for Home Consumption*, and the *Supplement to Imports Cleared for Home Consumption—Descriptions of Tariff Items and Statistical Key Codes;* and the half-yearly bulletin *Balance of Payments*. Preliminary information is available in summary form in the statements *Balance of Payments—Quarterly Summary, Overseas Investment—Preliminary Bulletin* (annual), *Australian Overseas Trade—Exports and Imports* (monthly), *Overseas Trade—Exports by Commodity Divisions* (monthly), and *Overseas Trade—Imports by Commodity Divisions* (monthly). Current information is included in the *Quarterly Summary of Australian Statistics*, the *Monthly Review of Business Statistics*, the *Digest of Current Economic Statistics*, and in more detail in the *Monthly Bulletin of Overseas Trade Statistics*. There are also the following additional mimeographed statements: *Exports of Principal Products of Australian Origin* (monthly), *Imports of Assembled New Motor Cars* (monthly), *Overseas Trade with Major Groups of Countries* (quarterly), and *Trade of Australia with Eastern Countries* (annually). Additional unpublished details of exports and imports can be supplied on request.

A subscription service is available from this Bureau to provide for the detailed requirements of individual users of overseas trade statistics. These special periodical returns are obtainable monthly or quarterly and show trade according to items of the Australian Export and Import Commodity Classifications or statistical key code dissections of Australian Customs Tariff items.

OVERSEAS TRADE

Constitutional provisions and legislation

Constitutional provisions

By the Commonwealth of Australia Constitution Act, section 51 (1), the power to make laws with respect to trade and commerce with other countries was conferred on the Commonwealth Parliament. Under section 86 of the Constitution, the collection and control of duties of customs and excise passed to the Executive Government of the Commonwealth on 1 January 1901. Other references to trade and commerce are contained in sections 87 to 95 of the Constitution (*see* pages 17–18).

Commonwealth legislation

Commonwealth legislation affecting overseas trade includes: the Customs Act, the Customs Tariff and the Customs Tariff (Dumping and Subsidies) Act. The Customs Act is the administrative Act under which the Department of Customs and Excise operates. The Customs Tariff provides the statutory authority for imposing the actual rates of duty operative from time to time, while the Customs Tariff (Dumping and Subsidies) Act provides protection for Australian industry against various forms of unfair trading.

The Customs Tariff

The first Commonwealth Customs Tariff was introduced by Resolution on 8 October 1901, from which date uniform duties came into effect throughout Australia. The Australian Customs Tariff has been developed in conformity with the policy of protecting economic and efficient Australian industries and of granting preferential treatment to certain imports from countries of the Commonwealth. Duties are imposed on some goods, generally of a luxury nature, for revenue purposes. Customs collections are a major source of revenue, but in its protective character the tariff has an important influence on the Australian economy.

The present tariff provides for general and preferential rates of duty, and its structure is based on the 'Brussels Nomenclature' which has its origins in the Convention on Nomenclature for the Classification of Goods in Customs Tariffs, signed in Brussels on 15 December 1950. Australia has operated a 'Brussels-type' tariff since 1 July 1965.

Preferential rates. Preferential rates apply to goods the produce or manufacture of the United Kingdom, Ireland, Canada, New Zealand, Papua, and New Guinea, and certain goods the produce or manufacture of specified countries, provided that such goods comply with the laws in force at the time affecting the grant of preference.

The following are the rules of origin for preference purposes.

'151.—(1.) For the purposes of this Act and the *Customs Tariff* 1966–1968 (other than section twenty of the last-mentioned Act), goods shall be treated as the produce of a country if they are unmanufactured raw products of the country.

(2.) For the purposes of this Act and the *Customs Tariff* 1966–1968 (other than section twenty or a direction under section thirty-three "c" of the last-mentioned Act), goods shall be treated as the manufacture of a country—

(*a*) if the goods were wholly manufactured in the country from materials of one or more of the following classes:

- (i) unmanufactured raw products;
- (ii) materials wholly manufactured in the country or in Australia, or in the country and in Australia; and
- (iii) imported materials that the Minister has, in relation to the country, determined, by notice published in the *Gazette*, to be manufactured raw materials; or

(*b*) if the goods were partly manufactured in the country, the process last performed in the manufacture of the goods was performed in the country and—

- (i) not less than three-quarters, or, in a case where the country is New Zealand, one-half, of the factory or works cost of the goods is represented by the value of labour or materials, or of labour and materials, of the country or of the country and Australia;
- (ii) in a case where the goods are goods of a class or kind not commercially manufactured in Australia, not less than one-quarter of the factory or works cost of the goods is represented by the value of labour or materials, or of labour and materials, of the country or of the country and Australia; or
- (iii) in a case where the country is New Zealand, not less than three-quarters of the factory or works cost of the goods is represented by the value of labour or materials, or of labour and materials, of New Zealand and the United Kingdom or of New Zealand, Australia and the United Kingdom.

(3.) For the purposes of a direction under section thirty-three "c" of the *Customs Tariff* 1966–1968 goods shall be treated as the manufacture of a country if—

(*a*) the process last performed in the manufacture of the goods was performed in the country; and

(*b*) not less than one-half of the factory or works cost of the goods is represented by the value of labour or materials, or of labour and materials, of the country or of the country and one or more of the following countries, that is to say, Australia and countries that, at the time the goods are entered for home consumption, are less developed countries, other than a country that, by virtue of a direction under sub-section (2) of section eleven of the *Customs Tariff* 1966–1968 is not to be treated as a less developed country in relation to the class of goods in which the goods are included.

'151A.—(1.) For the purposes of this Act and the *Customs Tariff* 1966–1968 (other than section twenty or a direction under section thirty-three "c" of the last-mentioned Act), goods shall not be treated as the produce or manufacture of the United Kingdom, Canada, New Zealand, Ireland, Malawi, Southern Rhodesia, Zambia, the Territory of Papua or the Territory of New Guinea unless they have been shipped from that country to Australia and, except where the Collector is satisfied that the intended destination of the goods when originally shipped from that country was Australia, have not been transhipped.

(2.) The last preceding sub-section does not apply—

(*a*) to goods the produce or manufacture of a country other than New Zealand that are imported into Australia from New Zealand; or

(*b*) to goods the produce or manufacture of a country other than the Territory of Papua or the Territory of New Guinea that are imported into Australia from the Territory of Papua or the Territory of New Guinea.

(3.) For the purposes of a direction under section thirty-three "c" of the *Customs Tariff* 1966–1968, goods shall not be treated as the produce or manufacture of a country unless they have been shipped from that country to Australia and, except where the collector is satisfied that the intended destination of the goods when originally shipped from that country was Australia, have not been transhipped.

(4.) For the purposes of this section—

(*a*) goods may be treated as having been shipped from the Territory of Papua or the Territory of New Guinea if they have been shipped from either of those territories; and

(*b*) goods may be treated as having been shipped from Malawi, Rhodesia or Zambia if they have been shipped from any of those countries or from Lourenco Marques or Beira in Mozambique'.

Declared preference countries. 10.—(1.) The Minister may, by order published in the *Gazette*, declare that a country specified in the order is a declared preference country for the purposes of this Act.

(2.) An order under the last preceding sub-section has effect, or shall be deemed to have had effect, from and including such date (which may be a date earlier than the date of publication of the order in the *Gazette*) as is specified in the order.

(3.) The Minister may, by order published in the *Gazette*, revoke an order under sub-section (1.) of this section.

(4.) An order under the last preceding sub-section has effect from and including such date (which shall not be a date earlier than the date of publication of the order in the *Gazette*) as is specified in the order.

(5.) Goods shall not be treated as the produce or manufacture of a declared preference country for the purposes of this Act unless, at the time the goods are entered for home consumption, the order under sub-section (1.) of this section in which the declared preference country is specified has effect or is deemed to have had effect.

Declared preference countries comprise:

- Bahama Islands
- Barbados
- Bermuda
- British Honduras
- British Solomon Islands Protectorate
- Brunei
- Ceylon
- Falkland Island and Dependencies
- Federation of Malaysia
- Fiji
- Gambia
- Ghana
- Gibraltar
- Gilbert and Ellice Islands Colony
- Guyana
- Hong Kong
- Jamaica and Dependencies
- Kenya
- Leeward Islands
- Maldive Islands
- Malta
- Mauritius and Dependencies
- Nigeria
- Republic of Cyprus
- Republic of Singapore
- St Helena and Ascension
- Seychelles and Dependencies
- Sierra Leone
- Tanzania
- Tonga
- Trinidad and Tobago
- Uganda
- Virgin Islands of the United Kingdom
- Windward Island

General rates. General rates apply to goods from all countries which do not qualify for preferential rates of duty under a particular tariff classification.

By-law provisions. Customs By-laws and Ministerial Determinations are instruments made by the Minister for Customs and Excise under the authority of sections 271 to 273D of the Customs Act by which goods may be admitted free of duty or at rates of duty lower than those normally applicable. By-laws and determinations may only be made under a by-law classification, which is a tariff classification containing the words 'as prescribed by by-law'. Such a classification sets out the by-law duty rates which will apply to goods only when such goods are included in a by-law or determination made under that classification. By-law admission of goods is in general guided by the use to which the goods are to be put, e.g. the goods must be for a use which will assist economic or industrial development. A prerequisite for by-law admission is that suitably equivalent goods be not reasonably available from Australian production. A by-law covers goods by general description with no limit on quantity and may be used by any importer of the goods. A determination covers a specific quantity of particular goods and may be used only by the importer mentioned in the determination.

Primage duties. In addition to the ordinary duties of customs imposed by the Customs Tariff, *ad valorem* primage duties at rates of five per cent or ten per cent are charged on some goods according to the types of goods and origin thereof. Other goods are exempt from primage duty. Goods the produce or manufacture of New Zealand, Norfolk Island, Fiji, Cocos (Keeling) Islands, Christmas Island, Papua, and New Guinea are exempt from primage duty.

Anti-dumping duties. The *Customs Tariff (Dumping and Subsidies) Act* 1961–1965 provides protection for Australian industry against various forms of unfair trading. Under this Act dumping duty may be imposed on goods that are sold to Australian importers at a price which is less than the normal value of the goods, where this causes or threatens material injury to an Australian industry. 'Normal value' under the Act means:

(*a*) fair market value in the country of export;
(*b*) price in the country of export to a third country;
(*c*) fair market value in a third country; or
(*d*) cost of production, plus f.o.b. charges, plus selling costs and profit.

The amount of dumping duty is the difference between the normal value and f.o.b. export price.

Countervailing duty may be levied on goods in respect of which any subsidy, bounty, reduction or remission of freight, or other financial assistance has been, or is being, paid or granted directly or indirectly upon the production, manufacture, carriage or export of those goods. The amount of the countervailing duty in respect of any goods is a sum equal to the amount of the subsidy, bounty, reduction or remission of freight or other financial assistance.

Import controls—Customs (Import Licensing) Regulations

A comprehensive system of import licensing was introduced in Australia at the beginning of the second World War under the authority of the Customs (Import Licensing) Regulations. Following the gradual relaxation of the restrictions from the end of the War, import licensing was reimposed on 8 March 1952 and continued in force until 18 October 1962. From that date restrictions were removed from all commodities with the exception of some goods retained under control for reasons associated with the protection of Australian industry. Further information on import controls is given in Year Book No. 51, page 492.

Export controls and incentives

Export restrictions. Section 112 of the Customs Act provides that the Governor-General may, by regulation, prohibit the exportation of goods from Australia and that this power may be exercised by: (*a*) prohibiting the exportation of goods absolutely; (*b*) prohibiting the exportation of goods to a specified place; and (*c*) prohibiting the exportation of goods unless prescribed conditions or restrictions are complied with. Goods subject to this export control are listed in the Customs (Prohibited Exports) Regulations.

Exchange control—Banking Act 1959–1967. As an integral part of the framework of exchange control, a control over goods exported from Australia is maintained under the provisions of Part III of the Banking (Foreign Exchange) Regulations, to ensure that the full proceeds of such goods are received into the Australian banking system and that these proceeds are received in the currency and in the manner prescribed by the Reserve Bank of Australia. This action is complementary to that taken under other parts of the Banking (Foreign Exchange) Regulations and under Part IV of the Banking Act to control the movement out of Australia of capital in the form of securities, currency and gold.

Export licences are issued subject to terms and conditions specified in the Banking (Foreign Exchange) Regulations, and may be subject to such further terms and conditions as are determined, or may be free from terms and conditions. On the receipt in Australia by the Reserve Bank, or by a bank acting as agent for that Bank, of advice that the foreign currency has been paid to the Reserve Bank or to an agent of the Bank in payment for goods exported in accordance with a licence granted under the regulations, the Bank, or an agent of the Bank, pays the licensee, or such other person as is entitled to receive it, an amount in Australian currency equivalent to the foreign currency received. In addition to commercial transactions involving exports, movements of personal effects are also controlled. Persons leaving Australia for overseas are required to obtain licences to cover their bona fide baggage, personal effects and household effects in any individual case where the gold content thereof exceeds $250, or where jewellery and other articles of high intrinsic worth either exceed $2,000 in value and those goods have not been the personal property of the passenger for at least twelve months.

Export incentives. The Commonwealth Government provides taxation concessions as financial incentives to export. A special income tax allowance for export market development expenditure is designed to encourage firms to incur promotion expenditure in advance of export sales and to assist exporters and potential exporters to expand sales in the existing markets and to enter new overseas markets. The allowance is in the form of a special deduction equal and additional to the ordinary deduction allowable in respect of specified expenses allowable in determining taxable income. Rebates of pay-roll tax are also granted to employers whose export sales of goods or property rights have increased above their average annual level in a base period. The rebate is available in the first place to employers who are producers for export, but a producer for export may issue an export certificate to an employer who has supplied components embodied in the final product.

Trade descriptions

The Commerce (*Trade Descriptions*) *Act* 1905–1966 gives power to require the application of a proper trade description to certain prescribed goods imported into or exported from Australia. Goods which must bear a prescribed trade description upon importation into Australia are specified in the Commerce (Imports) Regulations. As regards exports from Australia, marking requirements are prescribed in regulations issued under the Act and relating to specified export commodities.

Government authorities

Tariff Board

The *Tariff Board Act* 1921–1966 provides for the appointment of a Tariff Board consisting of eight members. Of these, two must, and three may, be members of the Commonwealth Public Service at the time of their appointment (or first appointments in the case of re-appointments). Members of the Board are appointed for terms of not less than one year and not more than five years. The purpose of the Tariff Board is to advise the Government on matters relating to the protection and encouragement of Australian industry.

The Minister of State for Trade and Industry is required to refer to the Board for inquiry and report the following matters: the necessity for new, increased, or reduced duties; the necessity for granting bounties and the effect of existing bounties; and any complaint that a manufacturer is taking undue advantage of the protection afforded him by the Tariff or by the restriction of the importation of any goods by charging unnecessarily high prices for his goods or acting in restraint of trade. In addition, the Minister may refer the following matters to the Tariff Board for inquiry and report: the general effect of the working of the Customs Tariff and the Excise Tariff; the fiscal and industrial effects of the Customs laws on the Commonwealth; the incidence between the rates of duty on raw materials and on finished or partly finished products; and other matters affecting the encouragement of primary and secondary industries in relation to the Tariff. The Minister of State for Customs and Excise may refer to the Tariff Board for inquiry and report the following matters: the classification of goods in the Customs Tariff or Excise Tariff and matters in connection with the interpretation of these Tariffs; the question of the value for duty of goods; whether goods not prescribed in departmental by-laws should be so prescribed; and any matters in respect of which action may be taken under the *Customs Tariff* (*Dumping and Subsidies*) *Act* 1961–1965.

Where a matter of the necessity for new or increased duties on any goods has been referred to the Board for inquiry and report, the Board may, in its report, recommend the restriction of the importation of those goods for such period as is specified in the report.

Inquiries conducted by the Board relating to a revision of the Tariff, a proposal for a bounty, a question under the Customs Tariff (Dumping and Subsidies) Act, or any complaint that a manufacturer is taking undue advantage of the protection afforded him by the Tariff or by the restriction of the importation of any goods, are held in public, and evidence in such inquiries is taken in public on oath, unless the Board accepts evidence as confidential or in the form of a written statement by a witness on oath. The Board is required to make available to the public the contents of any such written statement except any matter which it accepts as confidential.

Special Advisory Authority

The Minister for Trade and Industry may also request a Special Advisory Authority to inquire into cases where urgent action appears necessary to protect an Australian industry against import competition pending receipt and consideration of a full report by the Tariff Board. The Special Advisory Authority's report must be submitted to the Minister within thirty days of the making of the request. Temporary protection recommended by a Special Advisory Authority may be imposed, but may only operate for a period of up to three months after the date of receipt of the final report by the Tariff Board on the goods concerned.

Trade agreements

Multilateral—General Agreement on Tariffs and Trade

The General Agreement on Tariffs and Trade (G.A.T.T.), which came into force on 1 January 1948, is a multilateral trade treaty designed to facilitate trading relations between participating countries by reducing tariff and other barriers to the free interchange of goods. The Agreement provides a framework within which negotiations can be held to reduce barriers to trade, and a structure for embodying the results of such negotiations in a legal instrument. Features of the Agreement are the schedules of tariff concessions participating countries have negotiated with each other, the application of most-favoured-nation treatment among the participants, the avoidance of trade discrimination, and a code of agreed commercial policy rules for international trading. Each participating country retains the right (*a*) to impose new or increased duties for protective purposes, except in respect of particular products where rates of duty have been bound against increase in negotiations under the Agreement; (*b*) by negotiation to modify or withdraw concessions formerly agreed; (*c*) to impose import restrictions to protect the balance of payments; and (*d*) to take emergency action where any industry is endangered by reason of any obligation incurred under the Agreement.

There have been six main tariff negotiations under the provisions of the Agreement, and a number of smaller scale negotiations preceding the accession of individual countries. As a result the tariff rates for a great many items entering into world commerce have been reduced and or bound against increase. Australia has obtained tariff concessions from individual countries on a number of her principal or potential exports to them, as a result both of direct negotiation by Australia and of negotiation by other countries. In the latter case the benefits occurred through the operation under the Agreement of the most-favoured-nation principle. The latest series of trade negotiations, the Kennedy Round, was based on a plan for linear tariff cuts by industrial countries on all industrial products, with a minimum of exceptions, and on the reduction of non-tariff barriers to trade and the creation of acceptable conditions of access to world markets for agricultural products. It concluded in June 1967 after three years of negotiations. Concessions were negotiated on trade valued at over $36,000 million. The average reductions in tariffs on industrial goods was roughly one-third, while in agriculture the most important item was the agreement reached on the basis for a new world grains arrangement. Overall results were substantial, but were unevenly spread in that efforts to reduce trade barriers were very much more successful for manufactures than for primary products. In the post-Kennedy Round period, therefore, Australia is placing particular emphasis on the work of the Committee on Agriculture, created in November 1967, to examine the problems in the agricultural sector.

Up to the end of 1968 the contracting parties had held twenty-five sessions, nearly all in Geneva, to deal with matters arising from the administration of the Agreement. As a general rule the contracting parties meet once a year, although in a few instances they have met twice. In 1960 a Council of Representatives was established to undertake work, both of an urgent and of a routine character, between the regular sessions of the contracting parties. Some of the provisions of the Agreement were revised in 1954 and 1955. The revised Agreement contains tighter provisions on non-tariff barriers to trade, and allows more freedom for countries to revise individual tariff items which had been bound against an increase in tariff negotiations under the Agreement.

Since G.A.T.T. has not been accepted definitively by any country except Haiti, the Agreement is at present being applied provisionally pursuant to a Protocol of Provisional Application. At the end of January 1969 seventy-six countries, whose foreign trade represents over eighty per cent of the total volume of world trade, were full contracting parties to the Agreement, two had acceded provisionally, and twelve applied the Agreement on a *de facto* basis.

Increasing attention has been focused in G.A.T.T. on specific trade and development problems of developing countries, and in February 1965 a new Part IV of G.A.T.T., aimed at helping developing countries solve these problems, was introduced on a *de facto* basis coming legally into force in June 1966. The new Part IV embodies commitments by individual and joint action by contracting parties, aimed at ensuring that the less developing countries can increasingly find the means to raise standards of living and promote rapid economic development through participating in international trade and achieving sustained growth of their export earnings.

As a means of helping to offset the competitive disadvantages faced by the new industries of the developing countries, and of putting these countries in a better position to compete with major industrial countries in the Australian market, Australia formulated in 1965 a system of tariff preferences on a range of manufactured and semi-manufactured products, all of which had been nominated by developing countries as being of export interest to them. It was recognised that Australia's initiative might well give a lead to other countries which might wish to use preferences to assist developing countries, and so lead to a compounding of the benefits to the developing countries. Before the Australian system could be introduced, it was necessary to obtain a waiver from the G.A.T.T. 'no-new-preference' provisions. Such a waiver was granted at the end of March 1966 and the first preferences for developing countries became effective in April 1966. The Australian system has been extended in scope from time to time and is successfully stimulating imports of the products concerned from developing countries. Features of the system are that it is non-reciprocal (in that Australia seeks nothing in return), that it contains safeguards for Australian industries and for the interests of third countries, and that it is subject to international supervision through the G.A.T.T.

Bilateral agreements

The United Kingdom. The original United Kingdom and Australia Trade Agreement (Ottawa Agreement) was signed on 20 August 1932. The provisions and history of the agreement were published in Year Book No. 43, page 329. A new Trade Agreement designed to replace the original agreement and correct the imbalance in benefits which had emerged in the twenty-five years of its operation came into effect on 9 November 1956. Briefly, this agreement preserves security for Australian exports in the United Kingdom market, but lowers the obligatory margins of preference which Australia extends to the United Kingdom. The agreement provides for re-negotiation after the initial five-year period, but by arrangement between the two Governments this re-negotiation has been postponed. In the meantime the agreement continues subject to six months notice of termination by either country. Further details of the 1956 Agreement may be obtained from Year Book No. 51, page 495.

Canada. The existing agreement between Australia and Canada came into force on 30 June 1960, replacing an agreement signed on 3 August 1931. The agreement provides for Australian goods to receive British Preferential Tariff rates, or better, upon entry into Canada, and for Canada to maintain margins of preference in favour of Australia on a range of commodities. The agreement specifies that Canadian goods, with some exceptions, shall receive the benefit of the British Preferential Tariff upon importation into Australia and that Australia shall maintain margins of preference in favour of Canada on a range of commodities. The agreement continues subject to six months notice.

New Zealand. The New Zealand-Australia Free Trade Agreement came into force on 1 January 1966. The agreement provides for free trade in certain scheduled goods. Provision is made for the addition of items to the schedule. The provision of the 1933 Trade Agreement between Australia and New Zealand continues in force as part of the Free Trade Agreement, except as superseded or modified by it.

Rhodesia. A trade agreement was negotiated with the Federation of Rhodesia and Nyasaland in June 1955. This agreement consisted mainly of an exchange of preferential tariff treatment over a range of items. The Federation was dissolved on 31 December 1963, but application of the Agreement was continued on a provisional basis between Australia and each of the three constituent territories Zambia (Northern Rhodesia), Rhodesia (Southern Rhodesia) and Malawi (Nyasaland). Zambia terminated the Trade Agreement with Australia on 30 June 1966 and the Agreement between Malawi and Australia lapsed on 1 January 1967. Following the unilateral declaration of independence by the Rhodesian Government in November 1965 tariff preferences between Australia and Rhodesia were suspended by both countries. Hence the trade agreement between Australia and Rhodesia is inoperative at the present time.

Malaysia. A trade agreement with the then Federation of Malaya became effective in August 1958. Under the agreement Malaya undertook to protect Australian wheat and flour from dumped or subsidised competition and to extend to Australia any tariff preferences it accords. Australia guaranteed free entry for natural rubber so long as the Papua-New Guinea crop was absorbed, and assured the Federation that natural rubber would not be at a disadvantage compared with synthetic rubber in respect of tariff or import licensing treatment. The Agreement continues to apply between Australia and that portion of Malaysia known previously as the Federation of Malaya.

Japan. An Agreement on Commerce between the Commonwealth of Australia and Japan was signed on 6 July 1957, and formally ratified on 4 December 1957. It was provided that the Agreement would remain in force until 5 July 1960, and thereafter unless prior notice of termination should be given by either Government. The agreement provides that each country shall extend most-favoured-nation treatment to the other in respect of customs duties and similar charges, and import and export licensing. Japan is not entitled to claim the benefit of preferences accorded by Australia to Commonwealth countries and dependent territories. Japan also gave certain specific commitments on some important Australian export commodities.

Following a review of the agreement, a Protocol of Amendment was signed on 5 August 1963 and formally ratified on 27 May 1964. Under the Protocol Australia agreed to withdraw action against Japan under Article XXXV of the General Agreement on Tariffs and Trade, and thus a full G.A.T.T. relationship was established between the two countries.

The specific undertakings agreed in 1957 have now lapsed and the following commitments have been entered into.

Japan has:

(*a*) undertaken not to accord less favourable import treatment (apart from tariff) for raw wool than for raw cotton,

(*b*) stated that it has no present intention of imposing a duty on wool, (*c*) undertaken to continue imports of Australian soft wheat at a stabilised level, and to purchase Australian hard wheat when necessary requirements are met,*

(*d*) stated that it will endeavour to expand opportunities for imports into Japan of Australian sugar, canned meat, leather, motor vehicles, butter, and cheese.

Australia has:

(*a*) undertaken to consult Japan on temporary protection cases affecting Japanese products (in such consultations Japan will consider whether the need for temporary protection can be obviated by measures taken in Japan),

(*b*) stated that equal opportunities of fair and equal competition are accorded to Japanese products in Australian Government purchases overseas.

The new agreement will be effective for three years from the date of ratification and thereafter subject to three months' notice of termination by either Government. There is provision for consultations to take place at least annually.

Indonesia. This agreement came into operation on 1 July 1959. It records the desirability of expanding trade between Australia and Indonesia. It also gives special recognition to the importance of the flour trade from Australia to Indonesia. Australia recognises the importance to Indonesia of its traditional exports to Australia. The agreement is subject to review and renewal annually.

Philippines. A trade agreement with the Philippines was signed in Manila on 16 June 1965. The agreement provides for an exchange of non-discriminatory treatment† while recognising existing preferences. The agreement is to operate for one year initially and continue thereafter unless one Government gives ninety days' notice of its intention to terminate it. The Philippines is not a member of G.A.T.T.

U.S.S.R. A trade agreement between Australia and the U.S.S.R. was signed in Moscow on 15 October 1965. The agreement provides for the exchange of non-discriminatory treatment between the two countries while recognising existing preferences. It operates initially for a period of four years. There is provision for consultation on request about any matter affecting the operation of the agreement.

Korea. On 21 September 1965 a trade agreement was signed in Seoul between Australia and South Korea. Basically the agreement provides for an exchange of non-discriminatory treatment with allowances for existing preferences. The agreement, to run for one year with provision for automatic extension, also provides for non-discrimination by State trading enterprises. Both Governments undertake to use their best endeavours to increase the volume of trade between the two countries.

Poland. A trade agreement between Australia and Poland was signed in Warsaw on 20 June 1966. The agreement provides for the exchange of non-discriminatory treatment between the two countries, while recognising existing preferences. It operates initially for a period of four years. There is provision for consultation on request about any matter affecting the operation of the agreement.

Bulgaria. A trade agreement between Australia and Bulgaria was signed in Sofia on 22 June 1966. The agreement provides for the exchange of non-discriminatory treatment between the two countries, while recognising existing preferences. It operates initially for a period of four years. There is provision for consultation on request about any matter affecting the operation of the agreement.

Romania. A trade agreement between Australia and Romania was signed in Bucharest on 18 May 1967. The agreement provides for the exchange of non-discriminatory treatment between the two countries, while recognising existing preferences. It operates initially for a period of four years. There is provision for consultation on request about any matter affecting the operation of the agreement.

Hungary. A trade agreement between Australia and Hungary was signed in Budapest on 5 December 1967. The agreement provides for the exchange of non-discriminatory treatment between the two countries, while recognising existing preferences. It operates initially for a period of four years. There is provision for consultation on request about any matter affecting the operation of the agreement.

Republic of China (*Formosa*). On 22 April 1968 a trade agreement was signed in Canberra between Australia and the Republic of China. The agreement provides for an exchange of non-discriminatory treatment while recognising existing preferences. The agreement is to operate for one year initially and continue thereafter unless one government gives ninety days notice of its intention to terminate it. The Republic of China is not a member of the G.A.T.T.

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* 'Soft' wheat is fair average quality wheat; 'hard' wheat is premium grade wheat similar to that grown in North America. † An agreement, with reservations, not to discriminate against each other with tariff or non-tariff barriers.

Trade services

Trade Commissioner Service

The stimulation of interest abroad in Australia's exports is an important government activity in which the Australian Trade Commissioner Service plays a prominent part. A brief account of the establishment and growth of the Trade Commissioner Service before the Second World War is available in Year Book No. 51, page 496. Since the War the service has increased steadily, and by early 1969 there were over 100 Trade Commissioners and Assistant Trade Commissioners in forty-six posts in thirty-five countries. In 1957 Australia's official commercial representation overseas was extended by the introduction of a system of government Trade Correspondents. These correspondents, who as a rule already reside in particular centres overseas, are engaged on a part-time basis to carry out market research, arrange introductions between buyer and seller, and generally promote Australia's trade interests in the same way as Trade Commissioners. Each Trade Correspondent operates under the general direction of a Trade Commissioner nearby.

Trade Commissioners and, to a lesser extent, Trade Correspondents, are responsible for commercial intelligence in their territories. Particular facilities provided for Australian exporters and export organisations include: surveys of market prospects; advice on selling and advertising methods; arranging introductions with buyers and agents; providing reports on the standing of overseas firms; advice and assistance to business visitors; helping to organise and carry through trade missions, trade displays, newspaper supplements, and other promotion and publicity media; providing information on import duties, import licensing, economic conditions, quarantine and sanitary requirements, and other factors affecting the entry and sale of goods; helping to attract desirable investment.

In some countries Trade Commissioners also participate in inter-governmental negotiations in the economic and commercial fields. In certain countries where there is no diplomatic or consular mission Trade Commissioners are called upon to act as the Australian representative.

Trade Commissioners and Assistant Trade Commissioners are drawn from either private enterprise or the public service, and applications for entry into the Service are invited periodically by public advertisement. Recruitment is generally at the Assistant Trade Commissioner level and persons selected are promoted to Trade Commissioner as experience and performance warrant. In the majority of posts the Trade Commissioner is supported by an Assistant Trade Commissioner.

The Trade Commissioner Service is administered by the Commonwealth Department of Trade and Industry (as distinct from the diplomatic and consular services administered by the Department of External Affairs), but in countries where there is an Australian diplomatic or consular mission it is the practice for Trade Commissioners to be attached to the mission and to hold an appropriate diplomatic or consular rank (Commercial Counsellor, Commercial Secretary or Commercial Attaché).

The overseas trade representation is shown in the chapter International Relations.

Trade Missions

Since 1954 the Australian Government has sent a number of trade missions abroad as part of the campaign to increase exports. The experience acquired has indicated the need for flexibility in techniques to suit particular products or markets. At present the following types of trade missions are in use.

Survey missions. These are organised to obtain precise knowledge about the export trade potential for specific products in an overseas market. Such methods are used to explore export prospects in new or developing areas where commercial intelligence is not readily available or where a complex industry is involved and the industry requires special export knowledge.

Specialised and general trade missions. Arrangements are made for specific industries or groups of firms representing a number of industries to participate in a planned selling campaign in overseas markets with known sales potential. The mission visits the market, publicises its products and negotiates sales.

Since 1954 Australia has sent overseas thirty-five trade and survey missions and five trade ships.

Further details on trade missions are included in Year Book No. 49, page 544.

Export Payments Insurance Corporation

The *Export Payments Insurance Corporation Act* 1956 established the Corporation with the objective of encouraging Australian manufacturers to export by protecting their exports against risks of loss arising from the non-payment of their overseas accounts. The Corporation is charged to be self-supporting, i.e. over a period its income should be adequate to cover the expenses of operation and any payments of claims which may be incurred.

The main risks of loss against which the Corporation insures are the 'commercial' risks of the insolvency or protracted default of the buyer and 'political' risks. The latter include exchange transfer difficulties; the imposition of government regulations which prevent the import of the goods into the buyer's country; war, revolution or civil disturbance in the buyer's country. For most 'political' risks insurance cover is available to a maximum of 90 per cent of the amount of loss in the pre-shipment period and a maximum of 95 per cent in the post-shipment period. The rate of cover for 'commercial' risks is fixed at 85 per cent.

The Corporation may submit to the Government, for consideration in the national interest, applications for payment insurance which are commercially unacceptable to the Corporation on its normal credit account. In considering such applications the Government takes account of both political and economic factors.

An amendment to the Act in November 1964 gave E.P.I.C. the authority to issue guarantees of payment to banks on money raised at banks for the purpose of financing exports. The existance of E.P.I.C. bank guarantees has considerably facilitated the raising of finance by exporters.

In addition to providing the above facilities, the Corporation insures, on behalf of the Commonwealth Government, eligible Australian investments in overseas countries against the three main 'political' risks, namely expropriation, exchange transfer difficulties, and war damage. For an investment to be eligible it must confer benefits on both Australia and the investment host country. As at 31 December 1968, 35 policies had been written for 12 investments mainly in South East Asia. The face value of these policies was $14.1 million.

Since the first policy was issued in September 1957, Australian exporters have made increasing use of the facilities of E.P.I.C. At 31 December 1968 the Corporation had 712 policies current on its commercial account (i.e. not including Government business) with a face value of over $288 million. The Corporation has issued policies covering exports to 143 countries and has insured a wide range of Australian exports.

A Consultative Council, composed of eight leading figures in the fields of banking, commerce, and industry, and two Government members advises the Corporation on its activities. The council meets two or three times a year and is appointed for a term of three years.

Further information on the Corporation is contained in Year Book No. 49, page 544. For particulars of its operations *see* Chapter 18, Private Finance.

Collection and presentation of statistics

Basic documents

Overseas trade statistics are compiled by the Commonwealth Bureau of Census and Statistics from copies of export and import entries submitted by exporters and importers or their agents to the Department of Customs and Excise as required by the Customs Act. The entries show the port of shipment and country of consignment for exports; and port of entry and country of origin for imports; the date, the description, quantity where required, the value (f.o.b.) of the goods, and for imports, the amount of duty paid thereon. The export statistical item is inserted by the exporter or his agent; the importer or his agent is required to insert the Tariff item number under which the goods are admitted and the statistical key code. These are verified by officers of the Department of Customs and Excise in the local offices of the Collector of Customs.

Scope of the statistics

Overseas trade statistics record all goods moving into or out of Australia (except those exclusions listed below) and are not confined to goods which are the subject of a commercial transaction. The area to which all overseas trade statistics issued by this Bureau apply is the whole of the Commonwealth of Australia, comprising the States of New South Wales, Victoria, Queensland, South Australia, Western Australia and Tasmania, the Northern Territory and the Australian Capital Territory. Non-contiguous territories under Australian administration are treated as outside countries, and trade transactions between Australia and those non-contiguous territories are part of the overseas trade of Australia. Such transactions are shown separately, i.e. the trade of Australia with each particular area is separately recorded and tabulated.

Inclusions and exclusions

(*a*) Exports and imports on government account including defence equipment are treated as normal transactions and are an integral part of overseas trade statistics.

(*b*) Direct transit trade, i.e. goods being transhipped or moved through Australia for purposes of transport only, is not recorded.

(*c*) Outside packages (containers, crates, etc.) are included as a separate item (statistical item 931.00.21) in the tabulation of imports and have been fully classified by country of origin since 1950–51. For exports, however, the value recorded for each item includes the value of the outside package.

(*d*) Bunkers and stores supplied to vessels and aircraft are excluded from statistics of exports but the value of these stores loaded during the years 1965–66 to 1967–68 is shown in the table on page 350.

(*e*) Those migrants' and passengers' effects for which a customs entry is not received are excluded from exports and imports.

(*f*) Those parcel post exports and imports of small value for which customs entries are not received are excluded from overseas trade statistics.

(*g*) Certain materials for inter-governmental defence projects for which customs entries are not required are excluded from imports.

(*h*) The value of ores and concentrates exported and imported includes the value of the gold content and the latter is not included in exports and imports of gold.

(*i*) Vessels and aircraft engaged in the transport of passengers or goods between Australia and other countries are excluded from exports and imports.

(*j*) Vessels and aircraft purchased for use on overseas routes are excluded from imports and any subsequent overseas sales of such vessels and aircraft from exports.

(*k*) Fish and other sea products landed abroad directly from the high seas by Australian vessels are excluded from exports.

Period covered by statistics

Exports. These are recorded statistically in the month in which the export entries are passed by the Department of Customs and Excise. Normally this is within a few days of shipment, although delays sometimes occur in the lodging of entries. Shipments are at times delayed by abnormal factors affecting sales, deliveries for export and the loading of ships. When such delays occur, exports during the affected period are diminished, and when the delays are overtaken, shipments include substantial quantities of accumulated stocks as well as current disposals. Wool shipments in any trade year may be materially affected by the time spread of wool auctions which usually end in July. The carry-over for shipments varies from year to year. New season's wheat normally becomes available for shipment from December onwards, and the quantity shipped in any trade year (ending June) depends on the size of the crop, the time spread on sales for export, and physical factors affecting the scheduling of deliveries.

Imports. Imports are recorded statistically in the month in which import entries are passed by the Department of Customs and Excise. Normally this is within a few days of discharge of cargoes.

Year of compilation. Since July 1914, detailed trade statistics have been compiled for financial years (July to June). Prior to that details were compiled on a calendar year basis.

Valuation

Imports into Australia prior to 15 November 1947 were recorded in British currency values, and full explanatory notes on the methods of recording import values before and since 15 November 1947 were included in Year Book No. 37, page 396.

All values in overseas trade statistics are determined on a 'free on board (f.o.b.) port of shipment' basis. This means that all charges, in particular the cost of freight and insurance, incurred after the goods have been exported from the port of shipment are excluded. Only transport and service charges incurred, or usually incurred, prior to export are included in the determination of trade values.

The procedure adopted to value exports and imports is as follows.

Exports. The recorded value of goods exported includes the cost of containers and outside packages and has been determined, since July 1937, as follows.

(*a*) Goods sold to overseas buyers before export are valued at the Australian f.o.b. port of shipment equivalent of the actual price at which the goods were sold.

(*b*) Goods shipped on consignment are valued at the Australian f.o.b. port of shipment equivalent of the price paid for similar goods of Australian origin in the principal markets of the country to which they are dispatched for sale.

An account of the bases of valuation in operation prior to July 1937 is given on page 469 of Year Book No. 39.

Imports. The recorded value of goods imported is the amount on which duty is payable or would be payable if the duty were *ad valorem.* Value for duty is the f.o.b. port of shipment equivalent of either:

(*a*) the actual price paid or to be paid by the Australian importer plus any special deduction (transactions value); or

(*b*) 'the current domestic value' of the goods; whichever is the higher.

> 'Current domestic value' is defined as 'the amount for which the seller of the goods to the purchaser in Australia is selling or would be prepared to sell for cash, at the date of exportation of those goods, the same quantity of identically similar goods to any and every purchaser in the country of export for consumption in that country.'

Quantity data

Where quantities are shown they are generally but not invariably expressed in terms of the normal trade unit. Where 'cental' is used, the unit is equivalent to 100 lb avoirdupois. Quantities are not tabulated in respect of statistical items for which there is no appropriate unit of quantity (for example, a statistical item which covers a number of commodities that cannot be recorded under a uniform unit of quantity).

Statistical concepts of trade

Trade systems. There are two generally accepted systems of recording overseas trade statistics, namely (*a*) special trade and (*b*) general trade. The Statistical Office of the United Nations defines the two systems as follows.

> '*System of Trade.* Two systems of recording trade are in common use, differing mainly in the way warehoused and re-exported goods are recorded.
>
> (*a*) *Special Trade.* Special imports are the combined total of imports directly for domestic consumption (including transformation and repair) and withdrawals from bonded warehouses or free zones for domestic consumption. Special exports comprise exports of national merchandise, namely, goods wholly or partly produced or manufactured in the country, together with exports of nationalised goods. (Nationalised goods are goods which, having been included in special imports, are then exported without transformation.)
>
> (*b*) *General Trade.* General imports are the combined total of imports directly for domestic consumption and imports into bonded warehouse or free zone. General exports are the combined total of national exports and re-exports. Re-exports, in the general trade system, consist of the outward movement of nationalised goods plus goods which, after importation, move outward from bonded warehouse or free zone without having been transformed.
>
> *Direct transit trade,* i.e. goods merely being transhipped or moving through the country for purposes of transport only, is excluded from the statistics of both special and general trade.'

Statistics in this volume are compiled on the 'general trade' basis; imports on a 'special trade' basis are published in the bulletin *Imports Cleared for Home Consumption,* issued annually.

Australian produce (national produce) is defined as goods, materials or articles which have been produced, manufactured or partly manufactured in Australia, except goods which were originally imported and have undergone only repair or minor operations which leave them essentially unchanged.

Re-exports are defined as goods, materials or articles originally imported which are exported either in the same condition in which they were imported, or after undergoing repair or minor operations which leave them essentially unchanged. 'Minor operations' include blending, packaging, bottling, cleaning, sorting, husking, and shelling.

Merchandise and non-merchandise trade. Total trade is divided into merchandise and non-merchandise trade. Merchandise trade is the equivalent of total exports and imports less certain items specified as non-merchandise. Prior to July 1965 non-merchandise trade consisted of exports and imports of specie and gold and silver. In July 1965 merchandise and non-merchandise trade were redefined in accordance with international standards recommended by the United Nations, and since that date non-merchandise items include commodities such as gold, legal tender, decorations, trophies, samples, passengers' personal effects, military equipment and stores for Australian Forces abroad, goods for the use of diplomatic and consular representatives, goods imported with the intention of being re-exported, goods exported with the intention of being re-imported, etc. A complete description of these commodities is contained in the Australian Export and Import Commodity Classifications published by the Bureau.

Balance of trade. Statistics of the balance of trade for balance of payments purposes are derived by making certain adjustments, relating both to scope and valuation to statistics of merchandise exports and imports. Statistics on the adjusted basis are published in statistical bulletins relating to the balance of payments. The adjustments include the following: imports are adjusted for the overall excess of recorded value for duty over the actual selling price to the importer; exports and imports of goods for repair and return and the value of repairs are deducted from merchandise trade; exports and imports of ships and aircraft for use on overseas routes, certain imports of defence equipment, and other trade items for which customs entries are not required are added. Adjustments are also made for timing differences between the change of ownership and the lodgment of import entries in the case of certain large items of equipment (e.g. warships).

The balance of trade is derived by comparing statistics of exports on a balance of payments basis with statistics of imports on that basis.

Balance of payments

Estimates of the balance of trade do not, however, measure Australia's total balance of payments which includes other transactions such as freight and insurance charges on imports, shipping expenditure in Australian ports, overseas travel, payments of profits and interest, and private and government borrowing overseas.

Country of consignment or origin

'Country of consignment' referred to in exports tables means the country to which goods were consigned at the time of export. Where the country of consignment is not determined at the time of export the goods are recorded as exported 'For orders'. 'Country of origin' referred to in import tables means the country of production. Classification of imports according to country of shipment was discontinued after the year 1920–21. A brief account of the dual system of import classification by country operating prior to the year 1921–22 is given on page 500 of Year Book No. 51.

Throughout this chapter, countries listed are shown in alphabetical order.

Commodity classifications

Overseas trade statistics were compiled according to the Statistical Classification of Imports and Exports up to and including 1964–65 for imports and 1965–66 for exports. From July 1965 imports have been classified according to the Australian Import Commodity Classification and Exports have been classified according to the Australian Export Commodity Classification from July 1966. Both classifications are based on the Standard International Trade Classification, Revised (S.I.T.C.), which is closely related to the Brussels Tariff Nomenclature used in the Australian Customs Tariff introduced in July 1965.

Pre-federation records

In the years preceding federation each State recorded its trade independently and in so doing did not distinguish other Australian States from external countries. The aggregation of the records of the several States is necessarily the only available means of ascertaining the trade of Australia for comparison with later years, but the results obtained may be subject to error, since past records of values and the direction of exports and imports were not on uniform lines. Exports and imports for years prior to federation may be found in early issues of the Year Book, particularly Year Book No. 2. On the introduction of the *Customs Act* 1901 the methods of recording values were made uniform throughout the States.

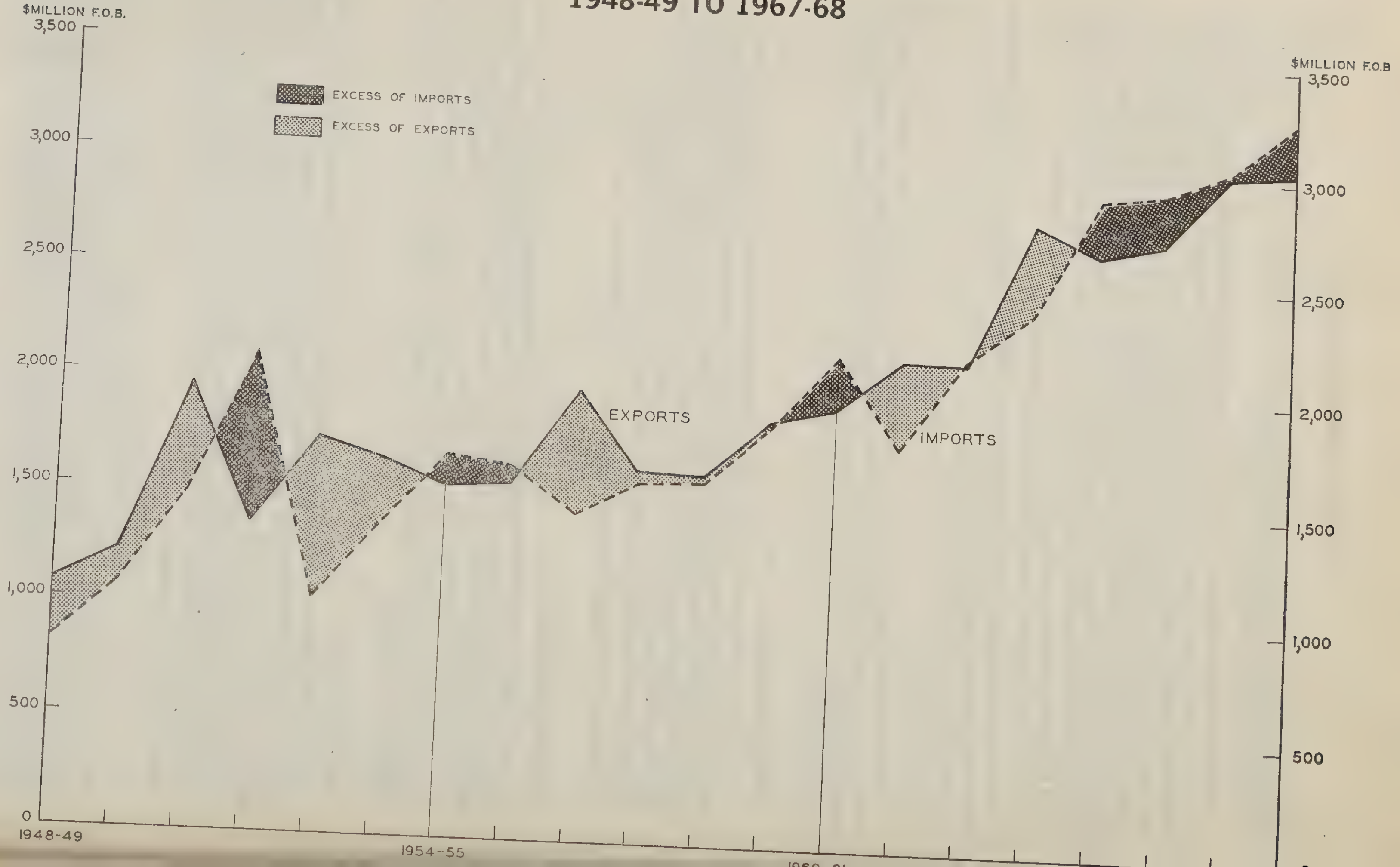
Total overseas trade

The following table shows the total trade of Australia with overseas countries from 1901 to 1967–68. The period 1901 to 1960–61 has been divided into five-year periods, and the figures shown represent the annual averages for the periods specified. Figures for the individual years were published in earlier issues, but figures for imports in issues prior to No. 37 were expressed in British currency.

PLATE 27

OVERSEAS TRADE: AUSTRALIA

1948-49 TO 1967-68



OVERSEAS TRADE: AUSTRALIA, 1901 TO 1967-68
(f.o.b.)

Period	*Exports*	*Imports*	*Excess of exports (+) or imports (−)*	*Value per head of population*	
				Exports	*Imports*
Annual average—	$m	$m	$m	$	$
1901 to 1905	102	71	+ 31	26.2	18.2
1906 to 1910	(*a*)139	94	+ 45	32.6	22.0
1911 to 1915–16	149	133	+ 16	30.8	27.6
1916–17 to 1920–21	230	183	+ 47	43.8	34.8
1921–22 to 1925–26	269	249	+ 20	45.8	42.2
1926–27 to 1930–31	263	239	+ 24	41.0	37.2
1931–32 to 1935–36	242	148	+ 94	36.2	22.2
1936–37 to 1940–41	315	247	+ 68	45.4	35.6
1941–42 to 1945–46	328	423	− 95	44.8	58.2
1946–47 to 1950–51	1,143	899	+244	145.4	114.3
1951–52 to 1955–56	1,572	1,566	+ 6	176.4	175.6
1956–57 to 1960–61	1,811	1,729	+ 82	182.0	173.7
Year—					
1958–59	1,623	1,593	+ 30	163.1	160.1
1959–60	1,875	1,854	+ 21	184.5	182.4
1960–61	1,938	2,175	−237	186.5	209.3
1961–62	2,155	1,769	+385	202.4	166.2
1962–63	2,152	2,163	− 11	198.5	199.4
1963–64	2,782	2,373	+410	251.6	214.5
1964–65	2,651	2,905	−253	235.1	257.5
1965–66	2,721	2,939	−218	236.6	255.6
1966–67	3,024	3,045	− 21	258.3	260.1
1967–68	3,045	3,264	−220	255.3	273.7

(*a*) Prior to 1906, ships' stores were included in exports. For value of such goods loaded on overseas vessels and aircraft during each of the years 1965–66 to 1967–68, *see* page 350.

Plate 27 opposite shows the overseas trade of Australia from 1948–49 to 1967–68.

The following table shows particulars of merchandise and non-merchandise trade for each of the years 1963–64 to 1967–68.

MERCHANDISE AND NON-MERCHANDISE TRADE: AUSTRALIA, 1963-64 TO 1967-68
($'000 f.o.b.)

EXPORTS

Year	*Merchandise*			*Non-merchandise*			*Total*
	Australian produce	*Re-exports*	*Total*	*Australian produce*	*Re-exports*	*Total*	
1963–64	2,691,345	34,301	2,725,646	35,569	21,245	56,814	2,782,460
1964–65	2,535,930	43,238	2,579,168	45,983	26,298	72,281	2,651,449
1965–66	2,578,184	55,348	2,633,532	59,913	27,508	87,421	2,720,953
1966–67	2,872,424	62,176	2,934,600	63,827	25,498	89,325	3,023,925
1967–68	2,861,812	73,388	2,935,200	73,344	36,132	109,476	3,044,675

IMPORTS

Year	*Merchandise*	*Non-merchandise*	*Total*
1963–64	2,329,576	43,082	2,372,658
1964–65	2,841,326	63,377	2,904,703
1965–66	2,898,280	41,212	2,939,492
1966–67	3,003,973	41,368	3,045,341
1967–68	3,215,003	49,470	3,264,473

Exports of principal articles of Australian produce

EXPORTS OF PRINCIPAL ARTICLES OF AUSTRALIAN PRODUCE, 1965-66 TO 1967-68

Article		Quantity			Value ($'000 f.o.b.)		
		1965–66	1966–67	1967–68	1965–66	1966–67	1967–68
Meat, fresh, chilled or frozen—							
Of bovine animals	'000 lb	612,949	578,603	564,250	195,533	198,311	198,630
Of sheep, lambs and goats	,,	213,474	212,286	254,477	45,665	43,642	49,984
Meat, canned or bottled	,,	55,633	47,509	45,647	14,587	13,141	12,676
Sausage casings (natural)		..	..	..	6,541	6,662	5,494
Other meat (incl. poultry, game, rabbits)		..	..	..	25,414	23,701	17,843
Milk and cream	'000 lb	123,340	200,958	149,863	18,193	29,532	21,961
Butter	,,	186,366	230,210	172,453	57,673	64,841	46,976
Cheese	,,	55,777	57,195	76,036	13,470	15,262	17,933
Fish (incl. shell fish) fresh or preserved by cold process	,,	21,225	18,515	21,386	23,807	23,109	30,983
Wheat	tons	5,075,344	6,403,160	6,395,852	264,062	361,227	342,767
Barley, unprepared	,,	223,089	417,814	127,246	11,508	21,569	6,569
Oats	,,	246,880	395,243	179,152	11,980	17,450	8,407
Flour (wheaten), plain white	'000 lb	781,458	713,306	760,454	24,753	23,074	23,534
Fruit, dried—							
Grapes	,,	181,004	152,011	151,131	25,988	21,148	20,775
All other	,,	11,907	8,038	8,028	2,450	2,037	2,015
Fruit, canned or bottled	,,	309,319	324,970	425,328	37,763	39,995	50,661
Sugar, the produce of cane	tons	1,252,546	1,638,263	1,597,235	93,925	99,535	97,582
Wine	gallons	1,969,073	1,774,102	1,839,074	3,556	3,169	3,153
Hides and skins—							
Calf, cattle and horse	'000 lb	116,995	120,178	112,067	20,707	21,099	14,685
Sheep and lamb (excl. pieces)	'000	30,078	28,768	30,989	63,747	62,856	46,127
Timber (excl. dunnage, stumps and the like)—							
Logs and undressed (incl. shooks and staves)	'000 super ft	15,229	18,009	12,657	2,303	2,706	2,465
Railway sleepers	,,	4,792	26,023	5,621	644	3,279	862
Wool—							
Greasy	'000 lb	1,322,646	1,366,557	1,390,319	699,774	726,310	643,275
Scoured or washed, carbonised, tops, noils and waste	,,	122,889	112,068	123,587	85,070	80,141	72,456
Iron ore concentrates (except roasted iron pyrites)	tons	337,856	5,468,386	12,325,812	2,705	46,013	103,070
Copper ores and concentrates	,,	41,961	38,310	47,256	7,534	8,902	10,098
Lead ores and concentrates	,,	118,253	108,994	113,498	21,337	19,439	22,047
Zinc ores and concentrates	,,	243,844	250,499	311,437	16,854	17,421	21,305
Titanium and zirconium concentrates	,,	844,650	845,943	920,767	29,085	32,141	35,316
Coal	,,	7,654,098	8,819,367	10,206,765	63,132	71,934	85,150
Petroleum and petroleum products		..	..	..	19,286	29,880	32,976
Tallow, inedible	cwt	1,243,684	1,612,166	1,654,071	10,397	11,509	8,644
Leather (excl. leather manufactures)		..	..	..	8,199	5,887	5,027
Lead and lead alloys, unworked	cwt	5,066,060	4,727,432	5,224,428	67,465	54,321	62,895
Copper and copper alloys	,,	958,742	433,620	578,925	51,341	27,399	33,104
Machinery and transport equipment		..	..	..	87,192	101,420	104,696
Drugs and chemicals		..	..	..	39,112	54,870	83,813
Paper and stationery		..	..	..	12,753	15,924	13,566
Zinc and zinc alloys	cwt	1,983,657	2,280,770	1,782,718	26,996	28,608	20,877
Motor vehicles (new, assembled)	No.	9,390	8,698	7,549	13,070	12,883	12,015
All other articles		..	..	..	412,526	493,904	542,744
Total, Australian produce		..	..	..	**2,638,097**	**2,936,251**	**2,935,156**

Classified summary of Australian overseas trade

The following table shows exports and imports according to divisions of the Australian Export and Import Commodity Classifications (based on the Standard International Trade Classification) during each of the years 1965–66 to 1967–68.

EXPORTS AND IMPORTS: DIVISIONS OF THE AUSTRALIAN EXPORT AND IMPORT COMMODITY CLASSIFICATIONS, 1965-66 TO 1967-68

($'000 f.o.b.)

Division No.	Description	Exports			Imports		
		1965–66(a)	1966–67	1967–68	1965–66	1966–67	1967–68
00	Live animals	4,681	6,085	5,891	1,786	2,563	2,745
01	Meat and meat preparations	281,217	278,822	279,155	459	486	957
02	Dairy products and eggs	94,679	114,401	92,855	3,340	3,655	3,817
03	Fish and fish preparations	24,532	24,968	34,000	29,488	28,793	27,463
04	Cereals and cereal preparations	340,145	463,203	419,087	2,302	2,875	3,790
05	Fruit and vegetables	110,885	100,349	110,780	17,246	17,538	19,268
06	Sugar and sugar preparations and honey	97,662	105,542	104,972	2,056	2,268	2,495
07	Coffee, tea, cocoa, spices and manufactures thereof	1,981	4,776	2,915	46,718	50,272	46,334
08	Feeding stuff for animals (excluding unmilled cereals)	4,353	7,185	6,383	5,270	7,881	8,176
09	Miscellaneous preparations chiefly for food	8,378	2,831	2,949	1,351	1,937	2,051

For footnotes *see* next page.

EXPORTS AND IMPORTS: DIVISIONS OF THE AUSTRALIAN EXPORT AND IMPORT COMMODITY CLASSIFICATIONS, 1965–66 TO 1967–68—*continued*

($'000 f.o.b.)

Division No.	*Description*	*Exports*			*Imports*		
		1965–66(a)	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
11	Beverages	7,019	6,790	7,535	11,279	10,401	13,457
12	Tobacco and tobacco manufactures	2,003	2,363	2,623	26,174	27,451	22,460
21	Hides, skins and fur skins, undressed	89,254	88,618	64,159	2,924	2,461	2,426
22	Oil seeds, oil nuts and oil kernels	53	548	837	10,845	5,500	9,495
23	Crude rubber (including synthetic and reclaimed)	948	565	465	26,005	27,695	24,482
24	Wood, timber and cork	3,311	6,319	3,753	34,522	34,910	41,506
25	Pulp and waste paper	18	170	227	26,249	26,396	25,145
26	Textile fibres and their waste	788,274	809,536	718,516	36,816	33,424	31,812
27	Crude fertilisers and crude minerals (excluding coal, petroleum and precious stones)	3,708	3,439	3,640	45,519	59,798	71,008
28	Metalliferous ores and metal scrap	112,320	163,340	242,574	4,008	4,293	5,956
29	Crude animal and vegetable materials, n.e.s.	12,032	13,040	11,442	10,462	11,434	11,999
32	Coal, coke, and briquettes	84,924	73,201	88,594	487	385	356
33	Petroleum and petroleum products		30,351	33,224	251,492	246,150	240,600
34	Petroleum gases and other gaseous hydrocarbons	373	273	106	11	26	45
41	Animal oils and fats	13,660	15,458	10,794	1,753	1,144	1,158
42	Fixed vegetable oils and fats		92	197	12,149	12,179	10,833
43	Animal and vegetable oils and fats, processed, and waxes of animal or vegetable origin		929	827	1,341	1,453	1,713
51	Chemical elements and compounds	(*b*)	19,592	57,711	87,340	103,047	100,195
52	Mineral tar and crude chemicals from coal, petroleum and natural gas	(*b*)	257	397	3,291	2,801	2,349
53	Dyeing, tanning and colouring materials	3,107	5,037	5,280	15,039	18,258	17,934
54	Medicinal and pharmaceutical products	13,776	14,024	13,294	35,962	35,663	38,011
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations	4,266	3,764	4,345	11,903	13,913	12.804
56	Fertilisers, manufactured	91	81	161	7,680	10,751	12,092
57	Explosives and pyrotechnic products	3,433	2,860	2,348	4,827	5,153	7,027
58	Plastic materials, regenerated cellulose and artificial resins	(*c*)35,056	6,750	5,379	67,546	68,870	76,096
59	Chemical materials and products, n.e.s.		16,794	15,399	32,170	38,829	42,496
61	Leather, leather manufactures, n.e.s. and dressed fur skins	8,390	6,272	5,512	5,255	6,035	6,056
62	Rubber manufactures, n.e.s.	3,144	2,200	5,055	28,170	28,357	39,587
63	Wood and cork manufactures (excluding furniture)	1,653	2,161	1,959	9,499	10,271	12,931
64	Paper, paperboard and manufactures thereof	7,950	10,035	9,235	83,699	88,338	93,354
65	Textile yarn, fabrics, made-up articles and related products	12,778	11,290	12,146	232,420	239,966	248,069
66	Non-metallic mineral manufactures, n.e.s.	13,318	17,418	18,002	53,141	55,166	57,691
67	Iron and steel	63,979	111,022	91,835	86,228	65.523	86,921
68	Non-ferrous metals	169,307	131,280	149,898	19,516	23,305	24,246
69	Manufactures of metal, n.e.s.	151,505	31,983	29,524	71,707	69,136	75,416
71	Machinery, other than electric		57,162	57,960	565,998	554,303	586,474
72	Electrical machinery, apparatus and appliances		24,958	25,564	180,972	193,784	207,781
73	Transport equipment (including warships, and military aircraft)		62,490	73,665	373,914	395,706	455,870
81	Sanitary, plumbing, heating and lighting fixtures and fittings	1,492	1,551	1,423	3,472	3,652	4,048
82	Furniture	1,178	883	1,275	3,426	2,865	3,614
83	Travel goods, handbags and similar goods	149	127	167	3,470	4,144	4,748
84	Clothing and clothing accessories and articles of knitted or crocheted fabric	2,844	4,389	5,537	19,122	20,917	25,657
85	Footwear, gaiters and similar articles and parts therefor	360	480	512	4,812	6,526	8,775
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks	9,973	11,842	13,922	79,759	84,829	92,173
89	Miscellaneous manufactured articles, n.e.s.	17,442	19,479	20,246	106,182	120,266	130,498
9(A)	Commodities and transactions not classified according to kind	21,931	35,224	58,949	89,708	110,231	110,542
	Total merchandise	*2,633,532*	*2,934,600*	*2,935,200*	*2,898,280*	*3,003,973*	*3,215,003*
9(B)	Non-merchandise	87,421	89,325	109,476	41,212	41,368	49,470
	Total	2,720,953	3,023,925	3,044,675	2,939,492	3,045,341	3,264,473

(*a*) Figures for divisions based on the new classification are partly estimated. Estimates for those divisions which have been grouped are not available. (*b*) Included with Divisions 58 and 59. (*c*) Includes Divisions 51 and 52.

Exports, by industrial group

The following table provides an analysis of Australian exports for the years 1965–66 to 1967–68. This analysis is designed to show fluctuations in exports of Australian produce dissected according to the main industry of their origin, although any such classification is necessarily somewhat conventional.

EXPORTS OF AUSTRALIAN PRODUCE, BY INDUSTRIAL GROUP
1965–66 TO 1967–68

	Value ($'000 f.o.b.)			*Proportion of value of exports of Australian produce (excluding gold) (per cent)*		
Industrial group	*1965–66*	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
Agriculture, horticulture and viticulture—						
Unprocessed	339,334	452,580	411,004	13.0	15.5	14.1
Processed	210,353	214,890	225,144	8.0	7.4	7.7
Total, agriculture, etc.	549,687	667,470	636,148	21.0	22.9	21.8
Pastoral—						
Unprocessed	1,054,084	1,077,917	975,344	40.3	36.9	33.4
Processed	133,284	127,172	110,184	5.1	4.4	3.8
Total, pastoral	1,187,368	1,205,089	1,085,528	45.4	41.3	37.2
Dairy and farmyard—						
Unprocessed	4,045	4,711	4,492	0.2	0.2	0.1
Processed	97,165	116,907	92,598	3.7	4.0	3.2
Total, dairy, etc.	101,210	121,618	97,090	3.9	4.2	3.3
Mines and quarries (other than gold)—						
Unprocessed	147,018	207,665	293,978	5.6	7.1	10.1
Processed	151,851	134,694	161,977	5.8	4.6	5.5
Total, mines, etc.	298,869	342,359	455,955	11.4	11.7	15.6
Fisheries—						
Unprocessed	25,805	25,616	32,923	1.0	0.9	1.1
Processed	1,216	2,264	3,402	. .	0.1	0.1
Total, fisheries	27,021	27,880	36,325	1.0	1.0	1.2
Forestry—						
Unprocessed	557	823	521	. .	. .	. .
Processed	4,182	6,467	4,264	0.2	0.2	0.2
Total, forestry	4,739	7,290	4,785	0.2	0.2	0.2
Total, primary produce—						
Unprocessed	1,570,843	1,769,312	1,718,262	60.1	60.6	58.8
Processed	598,051	602,394	597,569	22.8	20.7	20.5
Total, primary produce	*2,168,894*	*2,371,706*	*2,315,831*	*82.9*	*81.3*	*79.3*
Manufactures	375,129	455,887	491,322	14.5	15.6	16.8
Refined petroleum oils	18,985	29,085	32,208	0.7	1.0	1.1
Unclassified	50,671	61,477	80,422	1.9	2.1	2.8
Total Australian produce (excluding gold)	**2,613,679**	**2,918,155**	**2,919,783**	**100.0**	**100.0**	**100.0**
Re-exports (excluding gold)	82,856	87,674	109,519	. .	. .	. .
Gold exports	24,418	18,096	15,373	. .	. .	. .
Total value of recorded exports	2,720,953	3,023,925	3,044,675	. .	. .	. .

In the year 1967–68 Australian produce (other than gold) exported amounted to approximately $2,920 million. Of this $2,316 million or 79 per cent was mainly the produce of primary industries, comprising $1,718 million of unprocessed produce and $598 million of goods which had been processed to some degree before export. The values of the principal individual items of processed Australian primary produce exported were ($'000): raw sugar, 95,584; flour, etc., 23,534; canned fruit, 50,661; dried fruit, 22,790; wool (scoured, tops, etc.), 72,456; canned meats, 12,676; butter, 46,976;

milk (condensed, dried, etc.), 21,961; lead and lead alloys, unworked, 62,895; zinc and zinc alloys, 20,877; copper and copper alloys, 33,104; and wood, roughly squared or simply worked, 3,604. The value of manufactures exported as classified on page 320 was $491 million, approximately 17 per cent of Australian produce (other than gold) exported in 1967–68. The values of principal individual items here included were ($'000): machinery and transport equipment, 116,711; drugs and chemicals, 83,813; and paper and stationery, 13,566. Refined petroleum oils exported are shown separately, as they consist largely of imported crude oils refined in Australia and re-exported in the refined form. The values of principal individual items shown as 'unclassified' in 1967–68 were ($'000): individual consignments of less than $150 in value, 19,737; and military equipment and stores and supplies for Australian projects overseas, 24,928.

The items enumerated indicate how arbitrary is the line necessarily drawn between primary produce and manufactures in any classification of this kind. The value of processed primary products exported includes some element of value added by the simpler processes of manufacture, while the value shown for manufactures exported necessarily includes the value of raw materials (primary produce) used in those manufactures.

Imports of merchandise, by economic class

The following table shows imports of merchandise into Australia during the years 1965–66 to 1967–68 classified according to economic classes of (i) purpose and (ii) degree of manufacture.

IMPORTS OF MERCHANDISE, BY ECONOMIC CLASS: AUSTRALIA
1965–66 TO 1967–68

	Value ($'000 f.o.b.)			*Proportion of value of imports of merchandise (per cent)*		
	1965–66	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
PURPOSE						
Producers' materials for use in—						
Building and construction	93,680	86,742	99,887	3.2	2.9	3.1
Rural industries	40,360	54,706	59,132	1.4	1.8	1.8
Manufacturing—						
Motor vehicle assembly (*a*)	207,855	182,096	220,842	7.2	6.1	6.9
Other(*b*)	1,015,816	1,066,924	1,132,178	35.0	35.5	35.2
Total, producers' materials(b)	*1,357,711*	*1,390,468*	*1,512,040*	*46.8*	*46.3*	*47.0*
Capital equipment(*c*)—						
Producers' equipment	671,586	663,930	699,475	23.1	22.1	21.8
Transport equipment—						
Complete road vehicles and assembled chassis	74,671	74,921	89,021	2.6	2.5	2.8
Railway equipment, vessels and civil aircraft	92,276	110,717	101,469	3.2	3.7	3.1
Total, capital equipment	*838,533*	*849,568*	*889,965*	*28.9*	*28.3*	*27.7*
Finished consumer goods—						
Food, beverages and tobacco	109,574	109,504	113,600	3.8	3.6	3.5
Clothing and accessories	21,150	24,467	30,967	0.7	0.8	1.0
All other(*d*)	344,548	383,938	433,071	11.9	12.8	13.5
Total, finished consumer goods(d)	*475,272*	*517,909*	*577,638*	*16.4*	*17.2*	*18.0*
Fuels and lubricants(*e*)	48,385	30,788	27,030	1.7	1.0	0.8
Auxiliary aids to production(*f*)	92,471	96,611	83,098	3.2	3.2	2.6
Munitions and war stores	85,907	118,629	125,232	3.0	4.0	3.9
Grand total	**2,898,280**	**3,003,973**	**3,215,003**	**100.0**	**100.0**	**100.0**

For footnotes *see* next page.

IMPORTS OF MERCHANDISE, BY ECONOMIC CLASS: AUSTRALIA
1965–66 TO 1967–68—*continued*

	Value ($'000 f.o.b.)			*Proportion of value of imports of merchandise (per cent)*		
	1965–66	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
DEGREE OF MANUFACTURE(*g*)						
Producers' materials—						
Crude	376,196	405,565	419,516	13.0	13.5	13.0
Simply transformed	202,959	212,270	220,866	7.0	7.1	6.9
Elaborately transformed	778,555	772,633	871,658	26.9	25.7	27.1
Finished consumer goods—						
Crude	29,796	28,444	26,562	1.0	0.9	0.8
Simply transformed	43,982	42,469	44,367	1.5	1.4	1.4
Elaborately transformed	401,494	446,996	506,709	13.8	14.9	15.8
Total imports—						
Crude	405,992	434,009	446,078	14.0	14.4	13.9
Simply transformed	343,023	335,716	343,949	11.8	11.2	10.7
Elaborately transformed	2,149,265	2,234,248	2,424,976	74.2	74.4	75.4
Grand total	**2,898,280**	**3,003,973**	**3,215,003**	**100.0**	**100.0**	**100.0**

(*a*) Owing to insufficient information, it is not possible to treat unassembled tractors and other machinery in a similar manner to motor vehicles, and all such machinery and replacement parts therefor are treated as capital equipment whether imported in an assembled or unassembled condition. (*b*) Excludes a percentage for piece goods to be sold at retail, and paper to be used solely for wrapping, which are recorded in Finished consumer goods, All other, and Auxiliary aids to production, respectively. (*c*) *See* footnote (*a*). (*d*) Includes a percentage for piece goods to be sold at retail; *see* footnote (*b*). (*e*) Excludes crude petroleum, which is included in Producers' materials, Manufacturing—Other. (*f*) Includes a percentage for paper to be used solely for wrapping; *see* footnote (*b*). (*g*) The class Fuels and lubricants consists of goods 'simply transformed', and the classes Capital equipment and Munitions and war stores entirely of goods 'more elaborately transformed'. The class Auxiliary aids to production is about equally divided between goods 'simply transformed' and 'elaborately transformed'.

External trade of Australia and other countries

Essentials of comparison

Direct comparison of the external trade statistics of countries is possible only when the general conditions prevailing therein and the system of record are more or less identical. For example, in one country the value of imports may be the value at the port of shipment, while in another the cost of freight, insurance and charges may be added thereto. Again, the values of exports and imports in one may be based on transaction values, whereas in another they may be based on the official prices fixed from time to time by a commission constituted for the purpose. In later years, moreover, a very substantial difference in the value of imports would result from the different methods of converting the moneys of foreign countries, i.e. from the application of current rates of exchange or of the mint par. Finally, the external trade statistics of any country are also affected in varying degree by the extent to which they include transit or re-export trade. This class of trade represents a much greater proportion of the trade of Switzerland and Belgium-Luxembourg than that of other countries. France and the United Kingdom also have substantial re-exports, whereas in Canada, Australia and New Zealand re-exports account for a comparatively small proportion of trade.

Direction of overseas trade

Exports and imports, by country of consignment or of origin

The following two tables show the value of Australian exports and imports during each of the years 1965–66 to 1967–68 according to principal country of consignment or origin respectively, the second table in percentages. The proportions of Australian exports and imports by country of origin or consignment are shown graphically on plate 28 on page 325.

AUSTRALIAN EXPORTS AND IMPORTS, BY COUNTRY OF CONSIGNMENT OR ORIGIN, 1965-66 TO 1967-68

($'000 f.o.b.)

Country	*Exports*			*Imports*		
	1965–66	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
Austria	3,482	1,910	1,113	8,597	8,049	7,802
Belgium-Luxembourg	50,753	55,679	46,855	16,530	20,241	20,454
Canada	43,171	51,690	53,541	107,972	117,199	140,518
Ceylon	17,408	15,787	16,173	17,563	15,535	15,014
China (mainland)	106,541	128,613	126,459	23,460	26,148	23,592
China, Republic of (Formosa)	16,227	18,842	20,388	4,270	4,801	8,590
Finland	977	2,166	2,619	14,567	15,929	15,679
France	118,125	101,276	88,594	91,670	94,138	88,045
Germany, Federal Republic of	100,300	75,734	91,428	168,226	158,539	189,758
Hong Kong	58,774	64,260	59,876	25,358	34,193	36,729
India	28,001	58,339	65,466	35,012	33,889	35,296
Indonesia	5,359	6,938	13,870	61,763	56,629	55,430
Iran	14,118	9,331	5,391	34,159	25,901	18,893
Italy	110,244	126,757	87,764	49,701	53,178	72,716
Japan	470,410	586,437	642,072	280,173	296,044	343,310
Kuwait	5,233	9,937	9,266	28,255	34,992	41,506
Malaysia	(*a*)49,770	61,781	56,485	(*a*)31,924	27,985	28,842
Netherlands	38,985	36,970	36,061	40,223	47,056	48,337
New Zealand	171,277	177,352	155,579	46,859	47,274	61,648
Norway	4,240	10,076	9,633	10,287	9,790	12,755
Pakistan	7,383	53,143	5,944	16,390	17,999	14,562
Papua and New Guinea	72,722	86,894	92,433	17,633	18,172	19,167
Philippines	23,990	32,801	41,722	2,518	2,793	3,555
Poland	16,877	18,678	19,644	1,939	1,879	2,271
Saudi Arabia	6,321	10,447	13,076	45,839	50,505	49,030
Singapore	(*b*)34,004	56,486	58,138	(*b*)3,699	8,708	8,564
South Africa	22,204	43,074	28,463	17,401	17,090	19,506
Sweden	9,135	7,302	6,971	51,787	50,850	50,178
Switzerland	4,789	3,733	3,028	43,011	41,777	47,778
Thailand	15,573	23,722	23,494	1,150	1,666	1,969
United Kingdom	473,358	404,958	426,314	758,751	723,811	723,010
United States of America	338,388	359,388	402,810	703,597	781,263	840,886
U.S.S.R.	47,892	20,330	27,446	1,578	1,678	2,107
Yugoslavia	15,095	18,826	16,067	716	392	602
Other countries	214,500	277,181	286,794	165,816	183,600	196,815
Country unknown	5,327	7,087	3,698	11,098	15,648	19,559
Total	**2,720,953**	**3,023,925**	**3,044,675**	**2,939,492**	**3,045,341**	**3,264,473**

(*a*) Includes Singapore to 30 September 1965. (*b*) Included with Malaysia to 30 September 1965.

AUSTRALIAN EXPORTS AND IMPORTS
PROPORTIONS, BY COUNTRY OF CONSIGNMENT OR ORIGIN, 1965-66 TO 1967-68

(Per cent)

	Exports			*Imports*		
Country	*1965–66*	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
Austria	0.13	0.06	0.04	0.29	0.26	0.24
Belgium-Luxembourg	1.87	1.84	1.54	0.56	0.66	0.63
Canada	1.59	1.71	1.76	3.67	3.85	4.30
Ceylon	0.64	0.52	0.53	0.60	0.51	0.46
China (mainland)	3.91	4.25	4.15	0.80	0.86	0.72
China, Republic of (Formosa)	0.60	0.62	0.67	0.15	0.16	0.26
Finland	0.04	0.07	0.09	0.50	0.52	0.48
France	4.34	3.35	2.92	3.12	3.09	2.70
Germany, Federal Republic of	3.69	2.51	3.00	5.72	5.21	5.81
Hong Kong	2.16	2.13	1.97	0.86	1.12	1.13
India	1.03	1.93	2.15	1.19	1.11	1.08
Indonesia	0.20	0.23	0.46	2.10	1.86	1.70
Iran	0.52	0.31	0.18	1.16	0.85	0.58
Italy	4.05	4.19	2.88	1.69	1.75	2.23
Japan	17.29	19.39	21.09	9.53	9.72	10.52
Kuwait	0.19	0.33	0.32	0.96	1.15	1.27
Malaysia	(*a*)1.83	2.04	1.86	(*a*)1.09	0.92	0.88
Netherlands	1.43	1.22	1.19	1.37	1.55	1.48
New Zealand	6.29	5.87	5.11	1.60	1.55	1.89
Norway	0.16	0.33	0.32	0.35	0.32	0.39
Pakistan	0.27	1.76	0.20	0.56	0.59	0.45
Papua and New Guinea	2.67	2.87	3.04	0.60	0.60	0.59
Philippines	0.88	1.09	1.37	0.09	0.09	0.11
Poland	0.62	0.62	0.65	0.07	0.06	0.07
Saudi Arabia	0.23	0.35	0.43	1.56	1.66	1.50
Singapore	(*b*)1.25	1.87	1.91	(*b*)0.13	0.29	0.26
South Africa	0.82	1.42	0.93	0.59	0.56	0.60
Sweden	0.32	0.24	0.23	1.76	1.67	1.54
Switzerland	0.18	0.12	0.10	1.46	1.37	1.46
Thailand	0.57	0.79	0.77	0.04	0.05	0.06
United Kingdom	17.40	13.39	13.94	25.81	23.77	22.14
United States of America	12.44	11.88	13.22	23.94	25.65	25.76
U.S.S.R.	1.76	0.67	0.90	0.05	0.06	0.06
Yugoslavia	0.55	0.62	0.53	0.02	0.01	0.02
Other countries	7.88	9.18	9.43	5.63	6.04	6.03
Country unknown	0.20	0.23	0.12	0.38	0.51	0.60
Total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

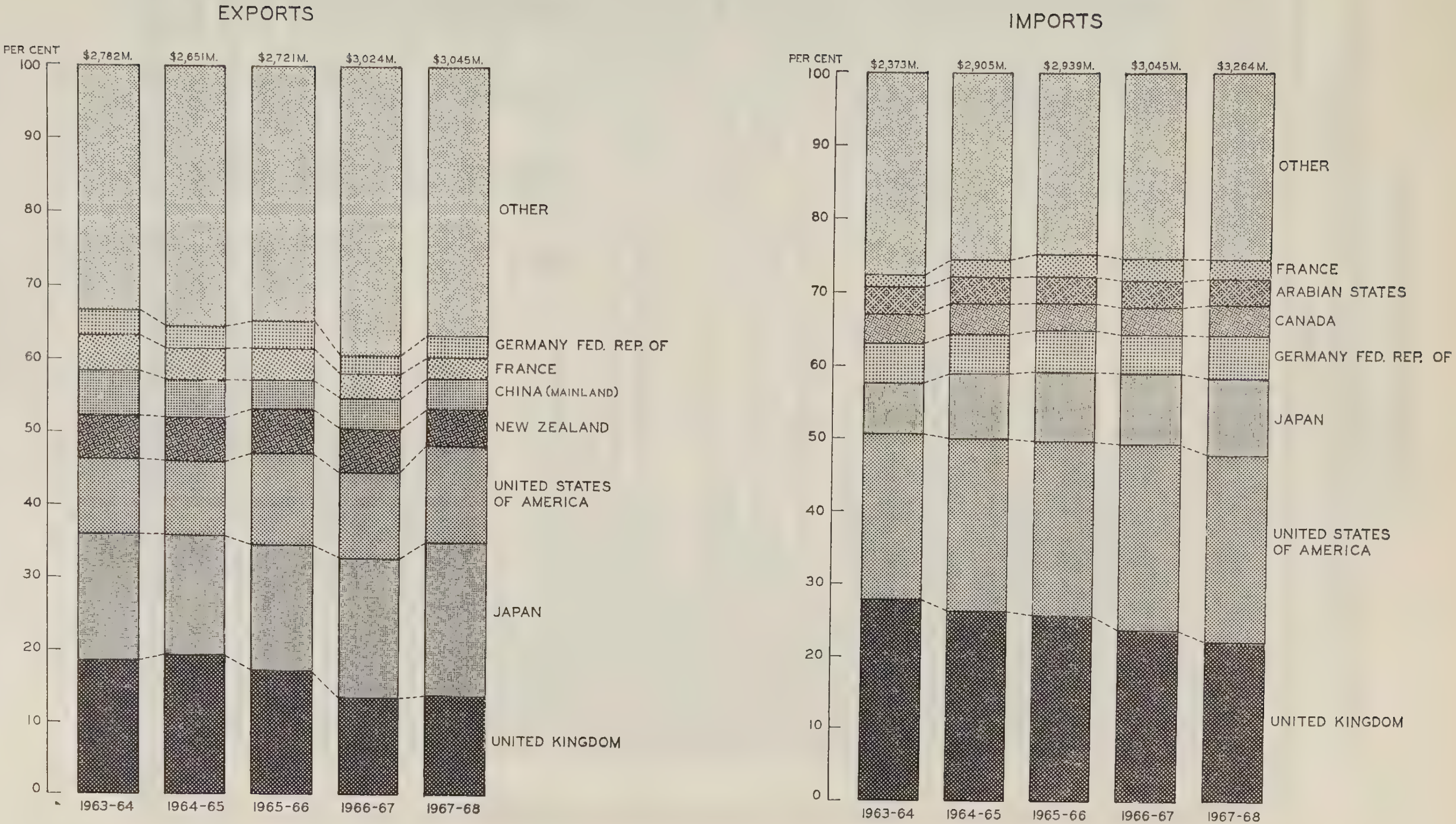
(*a*) Includes Singapore to 30 September 1965. (*b*) Included with Malaysia to 30 September 1965.

Exports, by country of consignment and by description

The following table shows details of exports to principal countries, classified according to divisions of the Australian Export Commodity Classification, for the years 1965–66 to 1967–68.

PROPORTIONS BY COUNTRY

1963-64 TO 1967-68



EXPORTS

IMPORTS

PLATE 28

EXPORTS, BY COUNTRY OF CONSIGNMENT: DIVISIONS OF THE AUSTRALIAN EXPORT COMMODITY CLASSIFICATION, 1965-66 TO 1967-68(a)

($'000)

Division No.	Description	Belgium-Luxembourg			Canada		
		1965–66	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
00	Live animals	..	..	..	2	1	2
01	Meat and meat preparations	333	129	63	10,392	14,995	13,261
02	Dairy products and eggs	14	..	3	33	154	44
03	Fish and fish preparations	122	134	188	58	129	106
04	Cereal grains and cereal preparations	25	157	832	102	256	62
05	Fruit and vegetables	700	416	543	11,305	11,052	12,225
06	Sugar and sugar preparations and honey	3	7	7	6,083	7,542	4,588
07	Coffee, tea, cocoa, spices and manufactures thereof	..	..	..	4	44	12
08	Feeding-stuff for animals (except unmilled cereals)	..	..	..	9	14	10
09	Miscellaneous preparations chiefly for food	1	5	4	15	3	1
11	Beverages	..	1	..	1,148	1,107	1,144
12	Tobacco and tobacco manufactures	..	..	..	1	..	..
21	Hides, skins and fur skins, undressed	1,870	779	139	24	5	12
22	Oil-seeds, oil nuts and oil kernels	10	35	10	..	..	..
23	Crude rubber (including synthetic and reclaimed)	..	..	..	..	..	..
24	Wood, timber and cork	1	4	2	45	12	13
25	Pulp and waste paper	..	..	..	..	..	..
26	Textile fibres and their waste	34,060	39,837	32,728	5,799	6,603	5,907
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones)	40	25	89	..	1	4
28	Metalliferous ores and metal scrap	9,971	10,361	9,493	413	923	2,956
29	Crude animal and vegetable materials, n.e.s.	35	52	30	984	496	550
32	Coal, coke and briquettes	..	..	..	..	..	..
33	Petroleum and petroleum products			24			1
34	Petroleum gases and other gaseous hydrocarbons	..	..	..	..	..	[illegible]
41	Animal oils and fats	5	2	..	76	30	14
42	Fixed vegetable oils and fats		..	..		..	[illegible]
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin		3	..		73	51
51	Chemical elements and compounds	(b)	..	..	(b)	68	3,536
52	Mineral tar and crude chemicals from coal, petroleum and natural gas	(b)	..	..	(b)	..	[illegible]
53	Dyeing, tanning and colouring materials	2	3	3	1	32	4
54	Medicinal and pharmaceutical products	46	239	174	44	60	37
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations	7	3	3	5	4	4
56	Fertilisers, manufactured	..	..	..	..	..	..
57	Explosives and pyrotechnic products	..	..	..	2	6	1
58	Plastic materials, regenerated cellulose and artificial resins	(c)10	3	..	(c)331	27	18
59	Chemical materials and products, n.e.s.		..	21		293	319
61	Leather, leather manufactures, n.e.s., and dressed fur skins	..	1	1	21	28	39
62	Rubber manufactures, n.e.s.	7	..	2	109	1	1
63	Wood and cork manufactures (except furniture)	9	5	3	51	35	61
64	Paper, paperboard and manufactures thereof	..	..	3	8	6	4
65	Textile yarn, fabrics, made-up articles and related products	185	4	17	94	55	74
66	Non-metallic mineral manufactures, n.e.s.	137	100	180	89	143	283
67	Iron and steel	357	1,694	453	2,364	1,443	935
68	Non-ferrous metals	2,499	1,321	1,258	837	923	1,788
69	Manufactures of metal, n.e.s.	184	80	81	1,637	657	963
71	Machinery (except electric)		37	84		660	1,254
72	Electric machinery, apparatus and appliances		106	126		511	400
73	Transport equipment		18	19		573	613
81	Sanitary, plumbing, heating and lighting fixtures and fittings	..	..	..	4	3	9
82	Furniture	..	..	..	2	7	9
83	Travel goods, handbags and similar articles	..	..	..	..	4	2
84	Clothing and clothing accessories; articles of knitted or crocheted fabric	2	8	8	25	162	202
85	Footwear, gaiters, and similar articles and parts therefor	..	..	..	1	1	6
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks	17	16	10	395	600	639
89	Miscellaneous manufactured articles, n.e.s.	28	15	46	107	390	313
9A	Commodities and transactions of merchandise trade, not elsewhere classified	6	22	5	65	244	205
	Total merchandise	*50,690*	*55,624*	*46,652*	*42,686*	*50,375*	*52,679*
9B	Commodities and transactions not included in merchandise trade	63	55	203	485	1,315	862
	Grand total	50,753	55,679	46,855	43,171	51,690	53,541

(a) Figures for 1965–66 are estimates. Estimates for those divisions which have been grouped are not available separately. (b) Included with Divisions 58 and 59. (c) Includes Divisions 51 and 52.

EXPORTS, BY COUNTRY OF CONSIGNMENT: DIVISIONS OF THE AUSTRALIAN EXPORT COMMODITY CLASSIFICATION, 1965–66 TO 1967–68(*a*)—*continued*

($'000)

sion	*Description*	*China (mainland)*			*France*		
		1965–66	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
	Live animals	48	254	171	..	..	..
	Meat and meat preparations	11	..	..	2,019	1,074	827
	Dairy products and eggs	5	..	..	..	..	..
	Fish and fish preparations	..	4	..	2,495	2,725	2,041
	Cereal grains and cereal preparations	100,382	115,947	120,812	17	36	43
	Fruit and vegetables	..	..	13	1,529	963	1,420
	Sugar and sugar preparations and honey	..	..	..	..	782	..
	Coffee, tea, cocoa, spices and manufactures thereof	..	..	..	..	..	..
	Feeding-stuff for animals (except unmilled cereals)	..	1	11	18	..	..
	Miscellaneous preparations chiefly for food	..	..	..	12	4	..
	Beverages	..	..	..	..	1	..
	Tobacco and tobacco manufactures	..	..	..	..	..	..
	Hides, skins and fur skins, undressed	501	276	226	40,371	36,626	26,225
	Oil-seeds, oil nuts and oil kernels	..	..	..	1	2	2
	Crude rubber (including synthetic and reclaimed)	..	..	..	..	..	..
	Wood, timber and cork	..	..	..	3	2	10
	Pulp and waste paper	..	..	..	..	..	..
	Textile fibres and their waste	3,490	7,786	3,840	65,056	53,595	49,468
	Crude fertilisers and crude minerals (except coal, petroleum and precious stones)	..	..	..	16	8	1
	Metalliferous ores and metal scrap	61	..	..	2,667	2,351	5,679
	Crude animal and vegetable materials, n.e.s.	..	..	..	43	96	83
	Coal, coke and briquettes	..	..	..	..	..	5
	Petroleum and petroleum products		..	1		..	..
	Petroleum gases and other gaseous hydrocarbons	..	..	..	..	..	..
	Animal oils and fats	785	1	276	33	79	88
	Fixed vegetable oils and fats		..	..		..	..
	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin		11	..		..	..
	Chemical elements and compounds	(*b*)	..	..	(*b*)	1	10
	Mineral tar and crude chemicals from coal, petroleum and natural gas	(*b*)	..	..	(*b*)	..	..
	Dyeing, tanning and colouring materials	..	10	29	11	5	6
	Medicinal and pharmaceutical products	..	..	..	285	428	212
	Essential oils and perfume materials; toilet, polishing and cleansing preparations	2	..	..	18	29	82
	Fertilisers, manufactured	..	..	..	..	..	..
	Explosives and pyrotechnic products	..	..	..	..	..	..
	Plastic materials, regenerated cellulose and artificial resins	(*c*)149	1	..	(*c*)16	10	5
	Chemical materials and products, n.e.s.		5	1		..	..
	Leather, leather manufactures, n.e.s., and dressed fur skins	49	12	..	22	50	15
	Rubber manufactures, n.e.s.	..	..	..	1	26	21
	Wood and cork manufactures (except furniture)	..	..	..	2	7	7
	Paper, paperboard and manufactures thereof	..	..	..	15	6	..
	Textile yarn, fabrics, made-up articles and related products	..	2	1	13	14	12
	Non-metallic mineral manufactures, n.e.s.	15	7	1	226	146	269
	Iron and steel	958	4,111	1,052	42	18	8
	Non-ferrous metals	15	177	..	1,925	82	220
	Manufactures of metal, n.e.s.	62	1	1	235	107	244
	Machinery (except electric)		1	12		124	179
	Electric machinery, apparatus and appliances		1	..		215	234
	Transport equipment		..	..		307	75
	Sanitary, plumbing, heating and lighting fixtures and fittings	..	..	..	..	..	..
	Furniture	..	..	..	..	11	..
	Travel goods, handbags and similar articles	..	..	..	..	..	..
	Clothing and clothing accessories; articles of knitted or crocheted fabric	..	2	..	5	20	30
	Footwear, gaiters, and similar articles and parts therefor	..	2	..	..	1	1
	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks	6	1	3	98	131	130
	Miscellaneous manufactured articles, n.e.s.	..	..	3	62	80	69
	Commodities and transactions of merchandise trade, not elsewhere classified	..	..	1	215	684	99
	Total merchandise	*106,541*	*128,611*	*126,456*	*117,472*	*100,847*	*87,822*
	Commodities and transactions not included in merchandise trade	..	2	3	653	429	772
	Grand total	**106,541**	**128,613**	**126,459**	**118,125**	**101,276**	**88,594**

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a) Figures for 1965–66 are estimates. Estimates for those divisions which have been grouped are not available separately. (*b*) Included Divisions 58 and 59. (*c*) Includes Divisions 51 and 52.

EXPORTS, BY COUNTRY OF CONSIGNMENT: DIVISIONS OF THE AUSTRALIAN EXPORT COMMODITY CLASSIFICATION, 1965–66 TO 1967–68(*a*)—*continued*

($'000)

Division No.	*Description*	*Germany, Federal Republic of*			*Hong Kong*		
		1965–66	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
00	Live animals	..	..	..	10	157	100
01	Meat and meat preparations	1,462	206	113	1,142	981	1,187
02	Dairy products and eggs	1,660	454	424	1,637	2,309	2,571
03	Fish and fish preparations	30	23	27	59	312	1,205
04	Cereal grains and cereal preparations	10,574	6,765	2,646	5,283	7,147	7,334
05	Fruit and vegetables	14,008	11,152	15,036	1,097	1,123	1,307
06	Sugar and sugar preparations and honey	71	32	36	44	354	1,445
07	Coffee, tea, cocoa, spices and manufactures thereof	5	..	..	3	14	8
08	Feeding-stuff for animals (except unmilled cereals)	..	103	102	96	81	87
09	Miscellaneous preparations chiefly for food	..	..	..	71	356	134
11	Beverages	1	1	1	114	100	100
12	Tobacco and tobacco manufactures	1	..	..	2	..	..
21	Hides, skins and fur skins, undressed	2,448	3,690	3,110	178	385	389
22	Oil-seeds, oil nuts and oil kernels	..	2	26	1	2	..
23	Crude rubber (including synthetic and reclaimed)	..	4	4	57	25	36
24	Wood, timber and cork	34	40	57	52	117	72
25	Pulp and waste paper	..	..	..	..	1	..
26	Textile fibres and their waste	51,261	40,643	46,582	8,399	8,259	7,160
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones)	38	12	4	14	39	27
28	Metalliferous ores and metal scrap	4,524	4,146	7,512	70	94	64
29	Crude animal and vegetable materials, n.e.s.	1,381	1,732	1,751	16	146	162
32	Coal, coke and briquettes	..	1	..	474	..	102
33	Petroleum and petroleum products		..	..		32	297
34	Petroleum gases and other gaseous hydrocarbons	..	..	..	44	51	..
41	Animal oils and fats	200	132	141	126	63	43
42	Fixed vegetable oils and fats		..	..		..	..
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin		61	48		39	53
51	Chemical elements and compounds	(*b*)	33	37	(*b*)	120	277
52	Mineral tar and crude chemicals from coal, petroleum and natural gas	(*b*)	..	..	(*b*)	..	..
53	Dyeing, tanning and colouring materials	24	28	225	44	207	178
54	Medicinal and pharmaceutical products	269	136	104	312	482	444
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations	25	10	26	219	257	326
56	Fertilisers, manufactured	..	..	..	..	..	..
57	Explosives and pyrotechnic products	..	36	..	6	..	202
58	Plastic materials, regenerated cellulose and artificial resins	(*c*)277	496	1	(*c*)984	1,196	745
59	Chemical materials and products, n.e.s.		326	21		61	51
61	Leather, leather manufactures, n.e.s., and dressed fur skins	16	5	56	1,143	764	856
62	Rubber manufactures, n.e.s.	93	10	9	39	24	20
63	Wood and cork manufactures (except furniture)	6	11	22	46	21	3
64	Paper, paperboard and manufactures thereof	12	7	4	473	562	619
65	Textile yarn, fabrics, made-up articles and related products	135	60	22	595	320	388
66	Non-metallic mineral manufactures, n.e.s.	786	821	919	1,305	3,329	2,813
67	Iron and steel	248	242	276	1,753	2,990	4,817
68	Non-ferrous metals	8,411	1,621	870	2,952	2,784	2,821
69	Manufactures of metal, n.e.s.	1,207	230	215	2,527	623	562
71	Machinery (except electric)		607	1,068		819	616
72	Electric machinery, apparatus and appliances		247	332		620	585
73	Transport equipment		546	235		1,325	716
81	Sanitary, plumbing, heating and lighting fixtures and fittings	3	1	1	113	55	91
82	Furniture	1	2	..	81	35	48
83	Travel goods, handbags and similar articles	..	..	..	41	25	27
84	Clothing and clothing accessories; articles of knitted or crocheted fabric	23	88	95	166	364	392
85	Footwear, gaiters, and similar articles and parts therefor	1	..	2	7	9	5
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks	169	226	208	132	382	529
89	Miscellaneous manufactured articles, n.e.s.	131	142	157	807	976	1,367
9A	Commodities and transactions of merchandise trade, not elsewhere classified	178	285	7,540	544	3,634	662
	Total merchandise	*99,715*	*75,412*	*90,067*	*33,279*	*44,171*	*44,042*
9B	Commodities and transactions not included in merchandise trade	585	322	1,361	25,495	20,089	15,834
	Grand total	**100,300**	**75,734**	**91,428**	**58,774**	**64,260**	**59,876**

(*a*) Figures for 1965–66 are estimates. Estimates for those divisions which have been grouped are not available separately. (*b*) Included with Divisions 58 and 59. (*c*) Includes Divisions 51 and 52.

EXPORTS, BY COUNTRY OF CONSIGNMENT: DIVISIONS OF THE AUSTRALIAN EXPORT COMMODITY CLASSIFICATION, 1965–66 TO 1967–68(*a*)—*continued*

($'000)

Description	*India*			*Italy*		
	1965–66	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
Live animals	36	56	72	..	..	..
Meat and meat preparations	53	30	31	4,502	1,523	483
Dairy products and eggs	1,083	887	413	268	20	1
Fish and fish preparations	..	..	..	352	204	81
Cereal grains and cereal preparations	9,696	23,357	36,476	4,162	9,742	98
Fruit and vegetables	32	20	34	673	614	602
Sugar and sugar preparations and honey	3	2	2	1	..	..
Coffee, tea, cocoa, spices and manufactures thereof	..	..	..	..	..	..
Feeding-stuff for animals (except unmilled cereals)	..	..	..	..	..	..
Miscellaneous preparations chiefly for food	1	..	2	..	..	4
Beverages	19	15	32	2	4	3
Tobacco and tobacco manufactures	4	1	..	..	..	..
Hides, skins and fur skins, undressed	468	287	260	14,502	20,211	15,418
Oil-seeds, oil nuts and oil kernels	..	..	..	1	1	3
Crude rubber (including synthetic and reclaimed)	..	..	4	..	..	..
Wood, timber and cork	..	50	1	12	10	12
Pulp and waste paper	..	..	..	..	..	..
Textile fibres and their waste	5,753	16,765	10,639	77,232	82,816	60,742
Crude fertilisers and crude minerals (except coal, petroleum and precious stones)	46	123	..	86	56	18
Metalliferous ores and metal scrap	152	775	608	1,563	3,738	4,337
Crude animal and vegetable materials, n.e.s.	1	3	..	265	270	395
Coal, coke and briquettes	..	..	..	6	..	..
Petroleum and petroleum products		..	6		..	..
Petroleum gases and other gaseous hydrocarbons	..	..	..	..	..	..
Animal oils and fats	64	1,714	1,877	488	392	82
Fixed vegetable oils and fats		..	..		..	..
Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin		..	..		..	..
Chemical elements and compounds	(*b*)	44	1,109	(*b*)	65	31
Mineral tar and crude chemicals from coal, petroleum and natural gas	(*b*)	..	..	(*b*)	..	..
Dyeing, tanning and colouring materials	26	78	50	23	59	54
Medicinal and pharmaceutical products	68	108	66	21	72	56
Essential oils and perfume materials; toilet, polishing and cleansing preparations	43	3	22	14	57	33
Fertilisers, manufactured	..	..	..	..	..	..
Explosives and pyrotechnic products	..	..	..	..	11	..
Plastic materials, regenerated cellulose and artificial resins	(*c*)100	16	12	(*c*)148	2	1
Chemical materials and products, n.e.s.		64	88		56	105
Leather, leather manufactures, n.e.s., and dressed fur skins	10	18	10	5	3	22
Rubber manufactures, n.e.s.	6	..	8	18	1	6
Wood and cork manufactures (except furniture)	10	..	1	1	5	2
Paper, paperboard and manufactures thereof	5	59	40	4	4	6
Textile yarn fabrics, made-up articles and related products	..	7	9	21	27	54
Non-metallic mineral manufactures, n.e.s.	50	32	27	21	9	57
Iron and steel	354	573	340	1,231	2,279	1,696
Non-ferrous metals	8,128	11,390	9,570	3,372	3.043	1,870
Manufactures of metal, n.e.s.	937	19	19	443	183	199
Machinery (except electric)		600	891		294	194
Electric machinery, apparatus and appliances		227	75		195	59
Transport equipment		227	1,848		29	78
Sanitary, plumbing, heating and lighting fixtures and fittings	..	3	..	5	..	..
Furniture	..	..	..	..	4	..
Travel goods, handbags and similar articles	..	..	..	..	..	5
Clothing and clothing accessories; articles of knitted or crocheted fabric	2	1	..	24	53	43
Footwear, gaiters, and similar articles and parts therefor	..	11	..	1	..	10
Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks	22	..	8	122	36	64
Miscellaneous manufactured articles, n.e.s.	24	15	8	52	104	88
Commodities and transactions of merchandise trade, not elsewhere classified	184	187	127	45	89	79
Total merchandise	*27,380*	*57,768*	*64,788*	*109,687*	*126,282*	*87,093*
Commodities and transactions not included in merchandise trade	621	571	678	557	475	671
Grand total	**28,001**	**58,339**	**65,466**	**110,244**	**126,757**	**87,764**

(*a*) Figures for 1965–66 are estimates. Estimates for those divisions which have been grouped are not available separately. (*b*) Included Divisions 58 and 59. (*c*) Includes Divisions 51 and 52.

EXPORTS, BY COUNTRY OF CONSIGNMENT: DIVISIONS OF THE AUSTRALIAN EXPORT COMMODITY CLASSIFICATION, 1965–66 TO 1967–68(*a*)—*continued*

($'000)

Division No.	Description	*Japan* 1965–66	*Japan* 1966–67	*Japan* 1967–68	*Malaysia(d)* 1965–66	*Malaysia(d)* 1966–67	*Malaysia(d)* 1967–
00	Live animals	46	171	153	416	258	
01	Meat and meat preparations	15,931	16,445	26,042	1,752	1,073	
02	Dairy products and eggs	4,180	16,028	7,769	7,768	8,261	
03	Fish and fish preparations	1,275	2,099	3,633	216	491	
04	Cereal grains and cereal preparations	24,787	38,831	40,561	9,580	18,632	
05	Fruit and vegetables	658	805	445	2,272	1,634	
06	Sugar and sugar preparations and honey	18,240	21,393	23,949	3,432	4,254	
07	Coffee, tea, cocoa, spices and manufactures thereof	426	2,907	1,244	21	7	
08	Feeding-stuff for animals (except unmilled cereals)	464	2,306	1,553	338	698	
09	Miscellaneous preparations chiefly for food	31	19	35	2,006	84	
11	Beverages	29	42	27	277	182	
12	Tobacco and tobacco manufactures	..	..	22	1	1	
21	Hides, skins and fur skins, undressed	12,690	8,358	6,350	119	40	
22	Oil-seeds, oil nuts and oil kernels	1	425	574	2	..	
23	Crude rubber (including synthetic and reclaimed)	332	228	150	12	14	
24	Wood, timber and cork	81	55	173	3	14	
25	Pulp and waste paper	14	68	56	4	93	
26	Textile fibres and their waste	259,982	274,542	245,984	63	13	
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones)	440	360	592	379	270	
28	Metalliferous ores and metal scrap	37,986	85,270	143,936	13	452	
29	Crude animal and vegetable materials, n.e.s.	507	859	1,112	24	92	
32	Coal, coke and briquettes	60,980	68,734	84,266	573	56	
33	Petroleum and petroleum products		1,483	2,669		92	
34	Petroleum gases and other gaseous hydrocarbons	90	8	..	..	..	
41	Animal oils and fats	581	1,900	591	673	329	
42	Fixed vegetable oils and fats		2	66		..	
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin		51	77		40	
51	Chemical elements and compounds	(*b*)	4,995	7,372	(*b*)	443	
52	Mineral tar and crude chemicals from coal, petroleum and natural gas	(*b*)	22	..	(*b*)	16	
53	Dyeing, tanning and colouring materials	36	14	141	87	127	
54	Medicinal and pharmaceutical products	95	61	20	758	542	
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations	162	156	154	419	378	
56	Fertilisers, manufactured	..	5	4	9	4	
57	Explosives and pyrotechnic products	1	2	41	443	2	
58	Plastic materials, regenerated cellulose and artificial resins	(*c*)8,974	45	56	(*c*)491	152	
59	Chemical materials and products, n.e.s.		6,335	4,459		144	
61	Leather, leather manufactures, n.e.s., and dressed fur skins	40	78	78	257	145	
62	Rubber manufactures, n.e.s.	11	6	21	59	41	
63	Wood and cork manufactures (except furniture)	31	49	21	59	16	
64	Paper, paperboard and manufactures thereof	17	65	74	1,354	1,283	
65	Textile yarn, fabrics, made-up articles and related products	279	398	634	275	223	
66	Non-metallic mineral manufactures, n.e.s.	4,413	5,000	4,470	137	134	
67	Iron and steel	1,169	5,696	7,379	886	1,433	
68	Non-ferrous metals	12,487	16,080	20,697	532	698	
69	Manufactures of metal, n.e.s.	1,125	420	755	7,588	1,116	
71	Machinery (except electric)		941	842		4,300	
72	Electric machinery, apparatus and appliances		171	175		1,283	
73	Transport equipment		497	468		981	
81	Sanitary, plumbing, heating and lighting fixtures and fittings	7	2	7	101	139	
82	Furniture	4	7	..	99	50	
83	Travel goods, handbags and similar articles	24	19	16	7	2	
84	Clothing and clothing accessories; articles of knitted or crocheted fabric	109	69	95	129	131	
85	Footwear, gaiters, and similar articles and parts therefor	10	..	2	2	61	
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks	139	180	268	180	77	
89	Miscellaneous manufactured articles, n.e.s.	722	666	781	853	568	
9A	Commodities and transactions of merchandise trade, not elsewhere classified	114	158	167	418	743	
	Total merchandise	*469,720*	*585,524*	*641,226*	*45,085*	*52,313*	
9B	Commodities and transactions not included in merchandise trade	690	913	846	4,685	9,468	
	Grand total	**470,410**	**586,437**	**642,072**	**49,770**	**61,781**	

(*a*) Figures for 1965–66 are estimates. Estimates for those divisions which have been grouped are not available separately. (*b*) Includ with Divisions 58 and 59. (*c*) Includes Divisions 51 and 52. (*d*) Includes Singapore to 30 September 1965.

EXPORTS, BY COUNTRY OF CONSIGNMENT: DIVISIONS OF THE AUSTRALIAN EXPORT COMMODITY CLASSIFICATION, 1965–66 TO 1967–68(*a*)—*continued*

($'000)

Description	Netherlands			New Zealand		
	1965–66	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
Live animals	..	..	..	317	221	275
Meat and meat preparations	550	300	62	23	20	47
Dairy products and eggs	6	432	4	58	75	29
Fish and fish preparations	44	68	109	59	19	23
Cereal grains and cereal preparations	2,107	11,817	9,776	8,259	6,511	3,106
Fruit and vegetables	2,498	1,633	2,726	5,561	4,509	4,132
Sugar and sugar preparations and honey	..	1	1	2,054	5,086	6,691
Coffee, tea, cocoa, spices and manufactures thereof	11	9	..	111	105	84
Feeding-stuff for animals (except unmilled cereals)	1	..	5	28	105	56
Miscellaneous preparations chiefly for food	2	1	1	43	101	178
Beverages	1	2	1	312	271	398
Tobacco and tobacco manufactures	..	..	..	35	21	17
Hides, skins and fur skins, undressed	1,219	1,321	1,053	168	303	19
Oil-seeds, oil nuts and oil kernels	..	..	26	33	57	170
Crude rubber (including synthetic and reclaimed)	..	..	..	242	133	121
Wood, timber and cork	86	70	57	1,703	1,803	1,081
Pulp and waste paper	..	..	..	..	..	2
Textile fibres and their waste	5,822	6,107	6,573	3,103	2,767	1,668
Crude fertilisers and crude minerals (except coal, petroleum and precious stones)	167	117	379	1,281	1,051	895
Metalliferous ores and metal scrap	3,345	2,786	7,783	128	63	86
Crude animal and vegetable materials, n.e.s.	276	456	540	371	312	213
Coal, coke and briquettes	..	..	..	6,083	252	43
Petroleum and petroleum products		1	1		7,689	12,895
Petroleum gases and other gaseous hydrocarbons	..	..	..	44	30	33
Animal oils and fats	532	1,038	546	278	10	5
Fixed vegetable oils and fats		..	1		15	26
Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin		44	27		75	26
Chemical elements and compounds	(*b*)	296	11	(*b*)	4,212	4,318
Mineral tar and crude chemicals from coal, petroleum and natural gas	(*b*)	..	..	(*b*)	13	11
Dyeing, tanning and colouring materials	198	112	38	722	1,061	1,300
Medicinal and pharmaceutical products	57	448	328	7,178	7,070	7,425
Essential oils and perfume materials; toilet, polishing and cleansing preparations	4	3	5	640	482	355
Fertilisers, manufactured	..	..	..	40	44	58
Explosives and pyrotechnic products	9	..	..	1,518	2,286	1,662
Plastic materials, regenerated cellulose and artificial resins	(*c*)227	1	7	(*c*)8,858	3,349	2,288
Chemical materials and products, n.e.s.		29	47		1,706	1,643
Leather, leather manufactures, n.e.s., and dressed fur skins	17	51	10	182	185	99
Rubber manufactures, n.e.s.	65	..	1	533	617	415
Wood and cork manufactures (except furniture)	2	2	2	353	518	401
Paper, paperboard and manufactures thereof	12	..	1	1,554	1,421	1,218
Textile yarn, fabrics, made-up articles and related products	80	23	6	7,932	7,659	6,886
Non-metallic mineral manufactures, n.e.s.	15	9	26	1,231	1,047	837
Iron and steel	4	1	3	30,281	34,073	26,848
Non-ferrous metals	19,864	8,463	4,145	12,316	13,115	9,838
Manufactures of metal, n.e.s.	419	169	165	49,130	6,416	5,617
Machinery (except electric)		184	250		11,121	7,956
Electric machinery, apparatus and appliances		183	103		7,465	5,809
Transport equipment		112	251		24,108	21,167
Sanitary, plumbing, heating and lighting fixtures and fittings	10	..	..	362	240	91
Furniture	..	2	..	32	11	19
Travel goods, handbags and similar articles	..	..	..	24	13	11
Clothing and clothing accessories; articles of knitted or crocheted fabric	18	68	75	191	270	336
Footwear, gaiters, and similar articles and parts therefor	..	2	..	46	56	58
Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks	77	93	77	3,547	3,494	3,369
Miscellaneous manufactured articles, n.e.s.	42	67	140	5,289	4,656	4,100
Commodities and transactions of merchandise trade, not elsewhere classified	35	24	115	1,936	1,965	1,943
Total merchandise	*37,821*	*36,548*	*35,479*	*164,190*	*170,280*	*148,397*
Commodities and transactions not included in merchandise trade	1,164	422	581	7,087	7,072	7,182
Grand total	**38,985**	**36,970**	**36,061**	**171,277**	**177,352**	**155.579**

Figures for 1965–66 are estimates. Estimates for those divisions which have been grouped are not available separately. (*b*) Included
Divisions 58 and 59. (*c*) Includes Divisions 51 and 52.

EXPORTS, BY COUNTRY OF CONSIGNMENT: DIVISIONS OF THE AUSTRALIAN EXPORT COMMODITY CLASSIFICATION, 1965–66 TO 1967–68(*a*)—*continued*

($'000)

Division No.	Description	*Pakistan*			*Papua and New Guinea*		
		1965–66	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
00	Live animals	..	..	..	123	119	151
01	Meat and meat preparations	8	3	8	5,416	5,493	6,254
02	Dairy products and eggs	42	221	109	970	1,284	1,452
03	Fish and fish preparations	..	..	..	126	207	376
04	Cereal grains and cereal preparations	2,234	38,880	1,683	5,768	6,399	7,760
05	Fruit and vegetables	1	2	5	1,187	911	948
06	Sugar and sugar preparations and honey	24	12	8	930	1,016	1,165
07	Coffee, tea, cocoa, spices and manufactures thereof	..	..	..	462	578	615
08	Feeding-stuff for animals (except unmilled cereals)	..	..	..	329	383	412
09	Miscellaneous preparations chiefly for food	1	..	..	489	561	583
11	Beverages	3	3	3	1,019	1,181	1,407
12	Tobacco and tobacco manufactures	..	..	..	1,209	1,361	1,594
21	Hides, skins and fur skins, undressed	..	..	..	3	4	3
22	Oil-seeds, oil nuts and oil kernels	..	..	..	..	..	1
23	Crude rubber (including synthetic and reclaimed)	..	..	..	1	1	2
24	Wood, timber and cork	..	602	..	58	88	40
25	Pulp and waste paper	..	..	..	1	4	4
26	Textile fibres and their waste	1,020	1,291	1,653	92	37	37
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones)	..	17	..	88	152	505
28	Metalliferous ores and metal scrap	..	567	321	9	10	12
29	Crude animal and vegetable materials, n.e.s.	2	1	1	39	108	29
32	Coal, coke and briquettes	154	473	..	1,025	4	1
33	Petroleum and petroleum products		..	..		700	910
34	Petroleum gases and other gaseous hydrocarbons	..	..	..	57	3	15
41	Animal oils and fats	1,339	1,840	15	343	287	308
42	Fixed vegetable oils and fats		..	8		49	42
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin		39	..		24	22
51	Chemical elements and compounds	(*b*)	14	17	(*b*)	357	315
52	Mineral tar and crude chemicals from coal, petroleum and natural gas	(*b*)	..	..	(*b*)	10	14
53	Dyeing, tanning and colouring materials	4	13	19	736	776	627
54	Medicinal and pharmaceutical products	8	28	51	524	465	432
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations	..	..	..	835	751	741
56	Fertilisers, manufactured	..	..	..	20	13	23
57	Explosives and pyrotechnic products	..	..	..	159	102	195
58	Plastic materials, regenerated cellulose and artificial resins	(*c*)1	..	2	(*c*)786	313	537
59	Chemical materials and products, n.e.s.		17	6		492	457
61	Leather, leather manufactures, n.e.s., and dressed fur skins	..	..	..	18	18	13
62	Rubber manufactures, n.e.s.	4	12	..	483	542	605
63	Wood and cork manufactures (except furniture)	..	..	..	203	442	286
64	Paper, paperboard and manufactures thereof	20	5	..	1,152	1,463	1,649
65	Textile yarn, fabrics, made-up articles and related products	5	3	30	397	453	553
66	Non-metallic mineral manufactures, n.e.s.	58	14	7	1,431	1,899	2,034
67	Iron and steel	648	5,572	958	2,694	2,702	3,231
68	Non-ferrous metals	423	1,931	386	427	622	675
69	Manufactures of metal, n.e.s.	842	19	11	20,607	6,536	3,949
71	Machinery (except electric)		719	91		8,441	8,575
72	Electric machinery, apparatus and appliances		102	43		3,759	3,859
73	Transport equipment		226	175		9,593	8,371
81	Sanitary, plumbing, heating and lighting fixtures and fittings	..	..	..	242	347	465
82	Furniture	1	..	..	295	355	511
83	Travel goods, handbags and similar articles	..	..	..	15	25	26
84	Clothing and clothing accessories; articles of knitted or crocheted fabric	3	3	1	561	818	1,093
85	Footwear, gaiters, and similar articles and parts therefor	..	..	..	203	283	329
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks	36	10	3	557	584	961
89	Miscellaneous manufactured articles, n.e.s.	8	6	5	1,096	1,227	1,526
9A	Commodities and transactions of merchandise trade, not elsewhere classified	141	183	24	7,769	10,767	12,458
	Total merchandise	*7,030*	*52,830*	*5,645*	*60,955*	*75,116*	*79,161*
9B	Commodities and transactions not included in merchandise trade	353	313	299	11,767	11,778	13,272
	Grand total	7,383	53,143	5,944	72,722	86,894	92,433

(*a*) Figures for 1965–66 are estimates. Estimates for those divisions which have been grouped are not available separately. (*b*) Included with Divisions 58 and 59. (*c*) Includes Divisions 51 and 52.

EXPORTS, BY COUNTRY OF CONSIGNMENT: DIVISIONS OF THE AUSTRALIAN EXPORT COMMODITY CLASSIFICATION, 1965–66 TO 1967–68(*a*)—*continued*

($'000)

Division No.	*Description*	*Philippines*			*Singapore (d)*		
		1965–66	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
00	Live animals	354	284	263	949	1,489	1,365
01	Meat and meat preparations	1,631	899	1,321	2,919	3,666	3,405
02	Dairy products and eggs	2,274	4,939	5,397	3,108	4,424	3,333
03	Fish and fish preparations	..	..	..	96	269	489
04	Cereal grains and cereal preparations	2,662	3,125	6,213	7,309	13,309	15,650
05	Fruit and vegetables	417	610	1,424	2,646	4,738	4,578
06	Sugar and sugar preparations and honey	..	4	..	97	551	1,882
07	Coffee, tea, cocoa, spices and manufactures thereof	..	3	..	5	16	6
08	Feeding-stuff for animals (except unmilled cereals)	557	527	374	396	635	792
09	Miscellaneous preparations chiefly for food	162	3	1	642	63	57
11	Beverages	7	5	7	185	192	136
12	Tobacco and tobacco manufactures	2	..	..	1	..	1
21	Hides, skins and fur skins, undressed	10	132	20	262	475	541
22	Oil-seeds, oil nuts and oil kernels	..	..	..	..	..	1
23	Crude rubber (including synthetic and reclaimed)	38	13	6	37	5	18
24	Wood, timber and cork	..	..	..	3	4	..
25	Pulp and waste paper	..	..	..	..	2	8
26	Textile fibres and their waste	2	..	..	..	..	..
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones)	183	231	184	109	228	57
28	Metalliferous ores and metal scrap	30	19	11	..	14	66
29	Crude animal and vegetable materials, n.e.s.	20	25	30	17	150	141
32	Coal, coke and briquettes	604	128	3	3,123	26	6
33	Petroleum and petroleum products		533	1,465		6,007	4,633
34	Petroleum gases and other gaseous hydrocarbons	..	..	..	1	..	..
41	Animal oils and fats	352	466	143	117	111	160
42	Fixed vegetable oils and fats		..	..		..	..
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin		52	39		9	24
51	Chemical elements and compounds	(*b*)	863	500	(*b*)	173	161
52	Mineral tar and crude chemicals from coal, petroleum and natural gas	(*b*)	..	..	(*b*)	..	..
53	Dyeing, tanning and colouring materials	123	152	252	148	262	239
54	Medicinal and pharmaceutical products	294	182	444	303	234	253
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations	37	42	26	284	247	385
56	Fertilisers, manufactured	..	..	..	2	1	1
57	Explosives and pyrotechnic products	14	3	..	736	49	..
58	Plastic materials, regenerated cellulose and artificial resins	(*c*)706	37	221	(*c*)187	86	205
59	Chemical materials and products, n.e.s.		163	144		122	162
61	Leather, leather manufactures, n.e.s., and dressed fur skins	44	75	22	326	250	358
62	Rubber manufactures, n.e.s.	28	44	25	18	38	40
63	Wood and cork manufactures (except furniture)	..	1	1	45	46	67
64	Paper, paperboard and manufactures thereof	202	255	304	616	875	1,043
65	Textile yarn, fabrics, made-up articles and related products	112	187	1,106	437	302	244
66	Non-metallic mineral manufactures, n.e.s.	179	392	249	134	222	256
67	Iron and steel	3,300	8,906	8,995	787	2,156	2,293
68	Non-ferrous metals	3,322	2,922	5,278	558	586	491
69	Manufactures of metal, n.e.s.	5,474	946	1,337	2,973	894	926
71	Machinery (except electric)		2,333	2,881		2,066	2,524
72	Electric machinery, apparatus and appliances		527	427		997	1,180
73	Transport equipment		1,620	978		1,385	3,268
81	Sanitary, plumbing, heating and lighting fixtures and fittings	17	21	12	97	161	117
82	Furniture	41	14	7	63	28	72
83	Travel goods, handbags and similar articles	..	..	..	3	6	3
84	Clothing and clothing accessories; articles of knitted or crocheted fabric	21	26	24	119	270	355
85	Footwear, gaiters, and similar articles and parts therefor	..	..	..	1	..	..
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks	65	256	739	92	316	571
89	Miscellaneous manufactured articles, n.e.s.	190	386	278	725	888	787
9A	Commodities and transactions of merchandise trade, not elsewhere classified	95	93	143	258	976	634
	Total merchandise	*23,568*	*32,446*	*41,294*	*30,936*	*50,022*	*53,987*
9B	Commodities and transactions not included in merchandise trade	422	355	428	3,068	6,464	4,151
	Grand total	23,990	32,801	41,722	34,004	56,486	58,138

(*a*) Figures for 1965–66 are estimates. Estimates for those divisions which have been grouped are not available separately. (*b*) Included with Divisions 58 and 59. (*c*) Includes Divisions 51 and 52. (*d*) Included with Malaysia to 30 September 1965.

EXPORTS, BY COUNTRY OF CONSIGNMENT: DIVISIONS OF THE AUSTRALIAN EXPORT COMMODITY CLASSIFICATION, 1965–66 TO 1967–68(*a*)—*continued*

($'000)

Division No.	Description	South Africa			United Kingdom		
		1965–66	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
00	Live animals	7	5	11	1	1	20
01	Meat and meat preparations	20	20	47	79,949	52,576	35,982
02	Dairy products and eggs	833	736	6	47,638	45,588	41,525
03	Fish and fish preparations	205	139	405	81	50	172
04	Cereal grains and cereal preparations	4,263	18,184	1,058	38,267	27,148	37,636
05	Fruit and vegetables	140	360	195	53,828	47,482	48,079
06	Sugar and sugar preparations and honey	1	3	1	44,976	41,687	37,074
07	Coffee, tea, cocoa, spices and manufactures thereof	47	25	36	4	17	4
08	Feeding-stuff for animals (except unmilled cereals)	..	..	..	122	404	271
09	Miscellaneous preparations chiefly for food	6	49	18	1,670	242	664
11	Beverages	9	5	3	1,983	1,571	1,264
12	Tobacco and tobacco manufactures	1	..	..	1	110	1
21	Hides, skins and fur skins, undressed	843	1,204	1,218	3,757	3,488	2,343
22	Oil-seeds, oil nuts and oil kernels	..	..	..	1	1	9
23	Crude rubber (including synthetic and reclaimed)	134	65	..	..	12	20
24	Wood, timber and cork	239	692	214	538	684	905
25	Pulp and waste paper	..	..	..	..	..	..
26	Textile fibres and their waste	1,532	1,945	1,202	80,143	85,325	71,919
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones)	15	6	4	208	163	119
28	Metalliferous ores and metal scrap	683	1,167	901	22,028	19,411	25,547
29	Crude animal and vegetable materials, n.e.s.	102	162	146	3,700	4,390	2,237
32	Coal, coke and briquettes	1,252	..	..	413	..	..
33	Petroleum and petroleum products		1,477	1,374		2,273	395
34	Petroleum gases and other gaseous hydrocarbons	..	..	..	..	3	..
41	Animal oils and fats	1,471	2,308	1,231	1,609	1,427	741
42	Fixed vegetable oils and fats		9	..		..	..
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin		..	20		246	235
51	Chemical elements and compounds	(*b*)	165	160	(*b*)	751	972
52	Mineral tar and crude chemicals from coal, petroleum and natural gas	(*b*)	..	..	(*b*)	..	..
53	Dyeing, tanning and colouring materials	30	91	19	36	154	150
54	Medicinal and pharmaceutical products	48	436	24	465	306	185
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations	20	24	49	54	55	82
56	Fertilisers, manufactured	..	..	..	..	..	..
57	Explosives and pyrotechnic products	24	..	..	84	35	7
58	Plastic materials, regenerated cellulose and artificial resins	(*c*)161	129	198	(*c*)3,991	475	53
59	Chemical materials and products, n.e.s.		84	140		2,461	2,507
61	Leather, leather manufactures, n.e.s., and dressed fur skins	80	94	110	5,197	3,553	2,944
62	Rubber manufactures, n.e.s.	45	31	17	588	57	34
63	Wood and cork manufactures (except furniture)	64	44	84	301	435	410
64	Paper, paperboard and manufactures thereof	79	311	118	260	281	106
65	Textile yarn, fabrics, made-up articles and related products	228	168	303	852	300	208
66	Non-metallic mineral manufactures, n.e.s.	133	11	61	878	799	791
67	Iron and steel	208	261	1,012	2,103	6,056	6,374
68	Non-ferrous metals	91	1,045	1,044	55,482	33,753	59,864
69	Manufactures of metal, n.e.s.	7,832	905	1,065	7,675	3.166	2,606
71	Machinery (except electric)		3,396	3,938		3,231	3,442
72	Electric machinery, apparatus and appliances		1,051	1,050		1,693	1,303
73	Transport equipment		4,520	8,923		1,137	2,693
81	Sanitary, plumbing, heating and lighting fixtures and fittings	33	11	13	46	36	14
82	Furniture	48	5	2	76	14	28
83	Travel goods, handbags and similar articles	1	2	4	2	1	1
84	Clothing and clothing accessories; articles of knitted or crocheted fabric	158	148	138	165	661	709
85	Footwear, gaiters, and similar articles and parts therefor	2	1	1	5	1	9
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks	307	481	437	2,275	1,938	2,692
89	Miscellaneous manufactured articles, n.e.s.	431	540	652	4,024	3,392	3,898
9A	Commodities and transactions of merchandise trade, not elsewhere classified	88	77	133	520	1,297	15,762
	Total merchandise	*21,911*	*42,593*	*27,786*	*465,999*	*400,337*	*415,004*
9B	Commodities and transactions not included in merchandise trade	293	481	677	7,359	4,621	11,310
	Grand total	**22,204**	**43,074**	**28,463**	**473,358**	**404.958**	**426,314**

(*a*) Figures for 1965–66 are estimates. Estimates for those divisions which have been grouped are not available separately. (*b*) Included with Divisions 58 and 59. (*c*) Includes Divisions 51 and 52.

EXPORTS, BY COUNTRY OF CONSIGNMENT: DIVISIONS OF THE AUSTRALIAN EXPORT COMMODITY CLASSIFICATION, 1965–66 TO 1967–68(*a*)—*continued*

($'000)

Division No.	Description	*United States of America*			*U.S.S.R.*		
		1965–66	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
00	Live animals	440	627	825			
01	Meat and meat preparations	133,825	160,483	174,512	..	..	..
02	Dairy products and eggs	1,339	1,643	833	..	..	..
03	Fish and fish preparations	18,876	17,428	24,247	..	..	..
04	Cereal grains and cereal preparations	56	182	469	..	..	..
05	Fruit and vegetables	626	425	2,500	29,245	..	..
06	Sugar and sugar preparations and honey	20,552	21,480	22,868	..	..	1
07	Coffee, tea, cocoa, spices and manufactures thereof	45	69	19	..	..	..
08	Feeding-stuff for animals (except unmilled cereals)	85	19	62	..	..	..
09	Miscellaneous preparations chiefly for food	728	390	306	..	..	..
11	Beverages	63	47	80	..	..	..
12	Tobacco and tobacco manufactures	13	16	24	..	..	..
21	Hides, skins and fur skins, undressed	1,860	1,704	1,405	..	..	..
22	Oil-seeds, oil nuts and oil kernels	1	14	2	..	..	..
23	Crude rubber (including synthetic and reclaimed)	5	7	6	..	..	..
24	Wood, timber and cork	181	163	235	5	..	..
25	Pulp and waste paper	..	..	..	..	..	..
26	Textile fibres and their waste	69,559	50,981	47,463	18,588	20,305	27,367
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones)	198	160	127	..	..	..
28	Metalliferous ores and metal scrap	22,195	22,572	20,658	..	..	..
29	Crude animal and vegetable materials, n.e.s.	3,169	2,612	2,391	..	..	..
32	Coal, coke and briquettes	2	..	1	..	..	..
33	Petroleum and petroleum products		3	11		..	..
34	Petroleum gases and other gaseous hydrocarbons	..	..	..	..	..	..
41	Animal oils and fats	178	270	259	..	..	..
42	Fixed vegetable oils and fats		..	..		..	..
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin		1	3		..	..
51	Chemical elements and compounds	(*b*)	6,074	30,370	..	..	..
52	Mineral tar and crude chemicals from coal, petroleum and natural gas	(*b*)	191	339	..	..	..
53	Dyeing, tanning and colouring materials	108	805	773	..	..	..
54	Medicinal and pharmaceutical products	943	305	361	..	..	..
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations	185	185	171	..	..	..
56	Fertilisers, manufactured	..	..	..	..	..	..
57	Explosives and pyrotechnic products	10	..	..	..	..	..
58	Plastic materials, regenerated cellulose and artificial resins	(*c*)7,010	21	127	..	..	..
59	Chemical materials and products, n.e.s.		3,761	4,399		..	..
61	Leather, leather manufactures, n.e.s., and dressed fur skins	519	358	241	..	..	..
62	Rubber manufactures, n.e.s.	131	114	3,144	..	..	..
63	Wood and cork manufactures (except furniture)	251	249	209	..	..	..
64	Paper, paperboard and manufactures thereof	351	236	286	..	..	..
65	Textile yarn, fabrics, made-up articles and related products	370	236	566	..	..	..
66	Non-metallic mineral manufactures, n.e.s.	1,174	2,084	2,678	..	..	..
67	Iron and steel	5,383	13,535	7,244	..	..	..
68	Non-ferrous metals	27.136	21,595	20,904	..	..	..
69	Manufactures of metal, n.e.s.	6,951	1,543	1,877	..	..	..
71	Machinery (except electric)		3,908	4,314		3	48
72	Electric machinery, apparatus and appliances		1,599	1,730		..	1
73	Transport equipment		3,266	2,064		..	..
81	Sanitary, plumbing, heating and lighting fixtures and fittings	99	41	1	..	..	..
82	Furniture	8	6	31	..	..	..
83	Travel goods, handbags and similar articles	9	6	32	..	..	..
84	Clothing and clothing accessories; articles of knitted or crocheted fabric	627	663	1,113	..	..	..
85	Footwear, gaiters, and similar articles and parts therefor	13	7	4	..	..	..
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks	682	1,500	1,510	1	6	11
89	Miscellaneous manufactured articles, n.e.s.	952	2,131	3,354	3	1	..
9A	Commodities and transactions of merchandise trade, not elsewhere classified	2,793	5,933	4,566	28	11	1
	Total merchandise	*329,699*	*351,648*	*391,713*	*47,871*	*20,326*	*27,430*
9B	Commodities and transactions not included in merchandise trade	8,689	7,740	11,097	21	4	16
	Grand total	338,388	359,388	402,810	47,892	20,330	27,446

(*a*) Figures for 1965–66 are estimates. Estimates for those divisions which have been grouped are not available separately. (*b*) Included with Divisions 58 and 59. (*c*) Includes Divisions 51 and 52.

Imports, by country of origin and by description

The following table shows details of imports from principal countries, classified according to divisions of the Australian Import Commodity Classification, for the years 1965–66 to 1967–68.

IMPORTS, BY COUNTRY OF ORIGIN: DIVISIONS OF THE AUSTRALIAN IMPORT COMMODITY CLASSIFICATION, 1965-66 TO 1967-68

($'000)

Division No.	*Description*	*Belgium-Luxembourg*			*Canada*		
		1965–66	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
00	Live animals	..	..	..	..	..	262
01	Meat and meat preparations	..	..	..	52	80	..
02	Dairy products and eggs	4	4	4	3	1	..
03	Fish and fish preparations	3	10	1	2,291	2,714	2,577
04	Cereal grains and cereal preparations	26	22	20	37	191	247
05	Fruit and vegetables	129	15	29	485	339	347
06	Sugar and sugar preparations and honey	69	39	4	3	3	19
07	Coffee, tea, cocoa, spices and manufactures thereof	2	2	3	62	93	4
08	Feeding-stuff for animals (except unmilled cereals)	..	..	..	124	5	..
09	Miscellaneous preparations chiefly for food	16	9	4	66	21	25
11	Beverages	..	..	..	32	44	66
12	Tobacco and tobacco manufactures	12	16	12	118	130	98
21	Hides, skins and fur skins, undressed	..	11	..	60	111	176
22	Oil-seeds, oil nuts and oil kernels	..	..	..	567	1	1,158
23	Crude rubber (including synthetic and reclaimed)	64	114	287	1,409	1,459	1,362
24	Wood, timber and cork	6	15	11	11,779	11,923	11,449
25	Pulp and waste paper	..	..	..	6,225	4,537	4,906
26	Textile fibres and their waste	1,021	881	988	1,157	895	1,718
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones)	18	34	55	9,027	11,393	16,864
28	Metalliferous ores and metal scrap	..	..	..	864	841	1,744
29	Crude animal and vegetable materials, n.e.s.	32	71	71	257	281	141
32	Coal, coke and briquettes	..	..	..	..	..	1
33	Petroleum and petroleum products	24	9	17	13	6	10
34	Petroleum gases and other gaseous hydrocarbons	..	..	..	..	..	..
41	Animal oils and fats	..	..	..	1	..	..
42	Fixed vegetable oils and fats	..	..	5	..	..	206
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin	1	1	9	131	114	110
51	Chemical elements and compounds	188	644	543	3,275	3,913	3,581
52	Mineral tar and crude chemicals from coal, petroleum and natural gas	..	..	..	..	..	..
53	Dyeing, tanning and colouring materials	27	28	26	107	148	203
54	Medicinal and pharmaceutical products	26	11	18	231	410	391
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations	26	28	21	383	1,133	610
56	Fertilisers, manufactured	401	107	16	1,035	1,038	411
57	Explosives and pyrotechnic products	9	47	29	103	63	51
58	Plastic materials, regenerated cellulose and artificial resins	131	120	194	3,079	3,572	4,269
59	Chemical materials and products, n.e.s.	78	95	313	333	291	365
61	Leather, leather manufactures, n.e.s., and dressed fur skins	12	20	14	46	63	17
62	Rubber manufactures, n.e.s.	254	70	127	291	296	346
63	Wood and cork manufactures (except furniture)	3	23	86	350	393	733
64	Paper, paperboard and manufactures thereof	398	687	712	16,805	20,927	21,089
65	Textile yarn, fabrics, made-up articles and related products	2,535	2,723	2,770	2,950	3,202	3,663
66	Non-metallic mineral manufactures, n.e.s.	3,183	4,120	4,134	437	512	521
67	Iron and steel	2,151	1,011	823	6,309	5,216	8,784
68	Non-ferrous metals	77	693	398	2,096	2,563	2,764
69	Manufactures of metal, n.e.s.	266	422	751	4,078	3,986	4,454
71	Machinery (except electric)	2,639	2,387	3,765	9,500	12,712	21,150
72	Electric machinery, apparatus and appliances	1,290	4,176	2,301	2,922	4,398	3,174
73	Transport equipment	34	273	215	12,561	10,409	12,622
81	Sanitary, plumbing, heating and lighting fixtures and fittings	35	8	11	52	63	95
82	Furniture	..	1	1	186	53	37
83	Travel goods, handbags and similar articles	..	..	1	49	102	74
84	Clothing and clothing accessories; articles of knitted or crocheted fabric	11	17	17	773	585	573
85	Footwear, gaiters, and similar articles and parts therefor	2	1	1	12	16	24
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks	496	535	513	1,613	1,327	1,088
89	Miscellaneous manufactured articles, n.e.s.	327	208	397	1,011	1,247	1,385
9A	Commodities and transactions of merchandise trade, not elsewhere classified	464	515	661	2,294	3,084	3,941
	Total merchandise	*16,491*	*20,224*	*20,376*	*107,647*	*116,907*	*139,904*
9B	Commodities and transactions not included in merchandise trade	39	17	78	325	292	614
	Grand total	**16,530**	**20,241**	**20,454**	**107,972**	**117,199**	**140,518**

IMPORTS, BY COUNTRY OF ORIGIN: DIVISIONS OF THE AUSTRALIAN IMPORT COMMODITY CLASSIFICATION, 1965–66 TO 1967–68—*continued*

($'000)

Division No.	*Description*	*Ceylon*			*China (mainland)*		
		1965–66	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
00	Live animals	..	..	..	..	..	..
01	Meat and meat preparations	..	..	..	20	46	9
02	Dairy products and eggs	..	..	..	..	..	..
03	Fish and fish preparations	..	..	..	866	763	277
04	Cereal grains and cereal preparations	..	..	..	15	22	18
05	Fruit and vegetables	392	334	842	391	473	579
06	Sugar and sugar preparations and honey . . .	..	..	..	11	27	7
07	Coffee, tea, cocoa, spices and manufactures thereof . .	16,049	14,050	13,238	670	808	305
08	Feeding-stuff for animals (except unmilled cereals) . .	..	..	..	..	..	..
09	Miscellaneous preparations chiefly for food . . .	..	1	..	13	73	29
11	Beverages	..	..	..	1	1	2
12	Tobacco and tobacco manufactures	..	..	..	..	1	..
21	Hides, skins and fur skins, undressed	..	..	..	247	63	51
22	Oil-seeds, oil nuts and oil kernels	..	..	..	210	76	62
23	Crude rubber (including synthetic and reclaimed) . .	40	51	34	..	..	..
24	Wood, timber and cork	..	1	..	..	..	..
25	Pulp and waste paper	..	..	..	..	..	..
26	Textile fibres and their waste	416	393	328	601	509	420
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones)	59	63	41	130	183	252
28	Metalliferous ores and metal scrap	..	..	..	80	130	70
29	Crude animal and vegetable materials, n.e.s. . . .	107	88	56	1,357	1,442	1,142
32	Coal, coke and briquettes	..	..	..	..	..	..
33	Petroleum and petroleum products	..	1	..	3	34	58
34	Petroleum gases and other gaseous hydrocarbons . .	..	..	..	..	..	..
41	Animal oils and fats	..	..	..	..	..	..
42	Fixed vegetable oils and fats	17	14	2	495	1,275	470
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin	..	..	..	2	..	..
51	Chemical elements and compounds	2	..	..	523	677	537
52	Mineral tar and crude chemicals from coal, petroleum and natural gas	..	..	..	..	..	..
53	Dyeing, tanning and colouring materials	..	..	..	16	18	17
54	Medicinal and pharmaceutical products	..	..	..	34	23	61
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations	10	4	6	184	184	154
56	Fertilisers, manufactured	..	..	..	..	..	..
57	Explosives and pyrotechnic products	..	..	..	136	190	176
58	Plastic materials, regenerated cellulose and artificial resins .	..	..	..	1	..	..
59	Chemical materials and products, n.e.s.	1	1	3	256	203	154
61	Leather, leather manufactures, n.e.s., and dressed fur skins .	..	16	30	8	52	40
62	Rubber manufactures, n.e.s.	..	..	..	32	23	16
63	Wood and cork manufactures (except furniture) . .	..	..	..	201	195	143
64	Paper, paperboard and manufactures thereof . . .	..	..	..	747	460	186
65	Textile yarn, fabrics, made-up articles and related products .	24	22	17	10,718	12,523	12,541
66	Non-metallic mineral manufactures, n.e.s.	60	114	92	746	1,190	815
67	Iron and steel	..	..	..	36	45	37
68	Non-ferrous metals	..	..	..	401	96	56
69	Manufactures of metal, n.e.s.	..	..	..	242	276	202
71	Machinery (except electric)	..	..	..	175	93	76
72	Electric machinery, apparatus and appliances . . .	..	..	..	16	20	80
73	Transport equipment	..	..	..	2	11	8
81	Sanitary, plumbing, heating and lighting fixtures and fittings	..	..	..	18	24	19
82	Furniture	..	..	..	15	24	43
83	Travel goods, handbags and similar articles . . .	..	..	..	22	61	62
84	Clothing and clothing accessories; articles of knitted or crocheted fabric	..	..	..	1,175	1,302	1,453
85	Footwear, gaiters, and similar articles and parts therefor .	..	..	..	626	228	526
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks. . . .	..	..	..	491	446	492
89	Miscellaneous manufactured articles, n.e.s. . . .	2	1	1	999	1,103	1,286
9A	Commodities and transactions of merchandise trade, not elsewhere classified	381	367	322	520	722	654
	Total merchandise	*17,560*	*15,521*	*15,012*	*23,452*	*26,116*	*23,584*
9B	Commodities and transactions not included in merchandise trade	3	14	2	8	32	8
	Grand total	**17,563**	**15,535**	**15,014**	**23,460**	**26,148**	**23,592**

IMPORTS, BY COUNTRY OF ORIGIN: DIVISIONS OF THE AUSTRALIAN IMPORT COMMODITY CLASSIFICATION, 1965–66 TO 1967–68—*continued*

($'000)

Division No.	*Description*	*France*			*Germany, Federal Republic of*		
		1965–66	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
00	Live animals	..	..	..	..	..	3
01	Meat and meat preparations	6	14	15	..	4	..
02	Dairy products and eggs	34	57	129	47	69	111
03	Fish and fish preparations	21	14	23	959	445	578
04	Cereal grains and cereal preparations	8	15	11	88	86	93
05	Fruit and vegetables	155	163	154	176	142	207
06	Sugar and sugar preparations and honey	13	7	8	10	10	13
07	Coffee, tea, cocoa, spices and manufactures thereof	17	20	17	49	57	102
08	Feeding-stuff for animals (except unmilled cereals)	93	201	194	4	14	19
09	Miscellaneous preparations chiefly for food	38	25	24	43	44	76
11	Beverages	945	1,018	1,548	107	148	213
12	Tobacco and tobacco manufactures	15	23	29	8	14	15
21	Hides, skins and fur skins, undressed	8	34	73	5	..	..
22	Oil-seeds, oil nuts and oil kernels	..	..	2	..	..	..
23	Crude rubber (including synthetic and reclaimed)	532	968	619	88	246	140
24	Wood, timber and cork	15	32	15	12	26	34
25	Pulp and waste paper	..	..	..	..	1	1
26	Textile fibres and their waste	536	102	64	851	930	857
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones)	163	168	603	95	175	127
28	Metalliferous ores and metal scrap	..	3	..	10	3	2
29	Crude animal and vegetable materials, n.e.s.	91	117	204	120	193	141
32	Coal, coke and briquettes	..	..	..	262	83	85
33	Petroleum and petroleum products	133	84	136	233	207	256
34	Petroleum gases and other gaseous hydrocarbons	1	3	3	..		..
41	Animal oils and fats	..	..	..	4	2	1
42	Fixed vegetable oils and fats	22	9	13	849	430	952
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin	1	..	..	22	36	22
51	Chemical elements and compounds	2,019	2,741	2,671	7,748	8,814	11,294
52	Mineral tar and crude chemicals from coal, petroleum and natural gas	..	..	10	..	39	7
53	Dyeing, tanning and colouring materials	241	217	200	2,467	3.291	3,936
54	Medicinal and pharmaceutical products	412	325	325	7,286	5,035	5,224
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations	986	1,015	1,177	681	864	845
56	Fertilisers, manufactured	392	134	160	996	1,338	1,455
57	Explosives and pyrotechnic products	20	124	427	69	73	77
58	Plastic materials, regenerated cellulose and artificial resins	2,234	1,627	1,798	8,847	7.726	7,992
59	Chemical materials and products, n.e.s.	468	688	1,045	1,787	2,704	3,188
61	Leather, leather manufactures, n.e.s., and dressed fur skins	847	759	1,034	219	470	363
62	Rubber manufactures, n.e.s.	1,013	1,594	2,963	1,026	1,554	2.607
63	Wood and cork manufactures (except furniture)	41	56	89	394	418	537
64	Paper, paperboard and manufactures thereof	209	457	277	1,846	1,816	1,961
65	Textile yarn, fabrics, made-up articles and related products	3.736	4,379	5,319	5,254	5.580	7,564
66	Non-metallic mineral manufactures, n.e.s.	1,656	1,775	1,473	3,424	3,747	4,031
67	Iron and steel	1,385	659	730	1,961	1.404	3,304
68	Non-ferrous metals	258	446	174	1,010	1,442	1,261
69	Manufactures of metal, n.e.s.	625	1,002	1,273	5,666	5,157	6.345
71	Machinery (except electric)	20.009	25.869	16,889	56,357	51,934	54,989
72	Electric machinery, apparatus and appliances	6.679	8,146	8,877	17,506	15,290	19,362
73	Transport equipment	26,969	26,194	25,767	18,311	15,167	23,416
81	Sanitary, plumbing, heating and lighting fixtures and fittings	23	26	30	242	251	359
82	Furniture	13	11	26	117	203	305
83	Travel goods, handbags and similar articles	19	24	46	133	152	191
84	Clothing and clothing accessories; articles of knitted or crocheted fabric	649	644	774	380	349	1,017
85	Footwear, gaiters, and similar articles and parts therefor	313	307	439	99	99	210
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks	1,314	986	1,096	9,923	9.207	10,318
89	Miscellaneous manufactured articles, n.e.s.	1,360	1,599	3,503	5,461	6.035	6,936
9A	Commodities and transactions of merchandise trade, not elsewhere classified	14,187	8,665	4,701	4,160	3.896	4,953
	Total merchandise	*90.924*	*93,548*	*87,180*	*167,417*	*157.420*	*188,099*
9B	Commodities and transactions not included in merchandise trade	746	590	865	809	1,119	1,659
	Grand total	**91,670**	**94,138**	**88,045**	**168,226**	**158,539**	**189,758**

IMPORTS, BY COUNTRY OF ORIGIN: DIVISIONS OF THE AUSTRALIAN IMPORT COMMODITY CLASSIFICATION, 1965–66 TO 1967–68—*continued*

($'000)

Division No.	*Description*	*Hong Kong*			*India*		
		1965–66	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
00	Live animals	..	..	..	..	..	..
01	Meat and meat preparations	..	1	..	..	1	1
02	Dairy products and eggs	..	..	..	..		..
03	Fish and fish preparations	422	897	402	891	886	772
04	Cereal grains and cereal preparations	38	37	48	8	7	10
05	Fruit and vegetables	145	132	144	1,496	2,264	1,763
06	Sugar and sugar preparations and honey	6	21	33	..	..	..
07	Coffee, tea, cocoa, spices and manufactures thereof	8	10	34	4,501	5,605	5,924
08	Feeding-stuff for animals (except unmilled cereals)	..	..	1	..	3	..
09	Miscellaneous preparations chiefly for food	93	102	96	1	1	2
11	Beverages	6	7	4	..	..	..
12	Tobacco and tobacco manufactures	..	..	..	3	17	45
21	Hides, skins and fur skins, undressed	2	..	..	119	41	148
22	Oil-seeds, oil nuts and oil kernels	19	17	27	..		..
23	Crude rubber (including synthetic and reclaimed)	..	..	6	..		
24	Wood, timber and cork	90	96	63	1	7	33
25	Pulp and waste paper	..	..	..	..	..	..
26	Textile fibres and their waste	141	150	173	694	703	736
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones)	..	..	..	521	277	281
28	Metalliferous ores and metal scrap	..	..	..	..	1	197
29	Crude animal and vegetable materials, n.e.s.	250	316	310	543	490	410
32	Coal, coke and briquettes	..	..	..	..	..	..
33	Petroleum and petroleum products	548	1	1	420	157	174
34	Petroleum gases and other gaseous hydrocarbons	..	..	..	..	..	..
41	Animal oils and fats	..	..	..	..	..	..
42	Fixed vegetable oils and fats	18	20	21	172	81	150
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin	1	..	..	24	3	71
51	Chemical elements and compounds	46	45	39	50	43	64
52	Mineral tar and crude chemicals from coal, petroleum and natural gas	..	..	..	32	..	..
53	Dyeing, tanning and colouring materials	..	1	2	21	15	16
54	Medicinal and pharmaceutical products	36	32	17	127	21	17
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations	25	13	25	48	40	62
56	Fertilisers, manufactured	..	..	..	..	..	..
57	Explosives and pyrotechnic products	12	2	13	..	..	..
58	Plastic materials, regenerated cellulose and artificial resins	46	22	17	..	..	..
59	Chemical materials and products, n.e.s.	49	51	65	..	2	7
61	Leather, leather manufactures, n.e.s., and dressed fur skins	9	56	74	354	237	213
62	Rubber manufactures, n.e.s.	2	3	1	255	98	47
63	Wood and cork manufactures (except furniture)	39	79	107	5	11	52
64	Paper, paperboard and manufactures thereof	98	136	148	2	67	2
65	Textile yarn, fabrics, made-up articles and related products	8,923	11,734	13,527	23,286	20,848	20,090
66	Non-metallic mineral manufactures, n.e.s.	168	265	280	234	119	207
67	Iron and steel	5	3	11	71	366	1,012
68	Non-ferrous metals	..	..	1	..	..	..
69	Manufactures of metal, n.e.s.	379	450	543	66	104	153
71	Machinery (except electric)	165	82	167	199	379	1,084
72	Electric machinery, apparatus and appliances	259	383	368	34	121	104
73	Transport equipment	412	62	114	3	4	10
81	Sanitary, plumbing, heating and lighting fixtures and fittings	309	372	232	6	13	12
82	Furniture	495	533	468	6	19	48
83	Travel goods, handbags and similar articles	679	947	1,253	1	14	12
84	Clothing and clothing accessories; articles of knitted or crocheted fabric	3,947	5,044	7,082	13	5	17
85	Footwear, gaiters, and similar articles and parts therefor	96	252	752	141	277	218
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks	519	603	774	22	17	22
89	Miscellaneous manufactured articles, n.e.s.	6,247	7,162	8,252	149	108	197
9A	Commodities and transactions of merchandise trade, not elsewhere classified	477	3,909	897	444	334	843
	Total merchandise	*25,228*	*34,051*	*36,589*	*34,963*	*33,807*	*35,225*
9B	Commodities and transactions not included in merchandise trade	130	142	140	49	82	71
	Grand total	**25,358**	**34,193**	**36,729**	**35,012**	**33,889**	**35,296**

IMPORTS, BY COUNTRY OF ORIGIN: DIVISIONS OF THE AUSTRALIAN IMPORT COMMODITY CLASSIFICATION, 1965–66 TO 1967–68—*continued*

($'000)

Division No.	*Description*	*Indonesia*			*Italy*		
		1965–66	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
00	Live animals	. .	. .	. .	. .	. .	6
01	Meat and meat preparations	. .	. .	. .	88	83	76
02	Dairy products and eggs	. .	. .	. .	632	712	602
03	Fish and fish preparations	. .	. .	. .	12	10	16
04	Cereal grains and cereal preparations	. .	1	. .	57	103	81
05	Fruit and vegetables	. .	. .	. .	995	1,191	1,155
06	Sugar and sugar preparations and honey	. .	. .	. .	19	17	29
07	Coffee, tea, cocoa, spices and manufactures thereof	4,532	2,523	2,725	160	44	29
08	Feeding-stuff for animals (except unmilled cereals)	. .	. .	. .	256	170	259
09	Miscellaneous preparations chiefly for food	. .	. .	. .	45	70	81
11	Beverages	. .	. .	. .	332	402	561
12	Tobacco and tobacco manufactures	30	18	43	5	7	12
21	Hides, skins and fur skins, undressed	. .	21	3	4	. .	. .
22	Oil-seeds, oil nuts and oil kernels	. .	. .	5	. .	. .	. .
23	Crude rubber (including synthetic and reclaimed)	. .	. .	. .	. .	. .	. .
24	Wood, timber and cork	25	11	14	1	1	. .
25	Pulp and waste paper	. .	. .	. .	. .	. .	. .
26	Textile fibres and their waste	63	262	13	326	289	181
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones)	. .	. .	. .	473	341	366
28	Metalliferous ores and metal scrap	. .	. .	. .	. .	. .	. .
29	Crude animal and vegetable materials, n.e.s.	50	45	37	70	56	73
32	Coal, coke and briquettes	. .	. .	. .	. .	. .	. .
33	Petroleum and petroleum products	56,678	53,505	52,392	. .	. .	. .
34	Petroleum gases and other gaseous hydrocarbons	. .	. .	. .	. .	. .	. .
41	Animal oils and fats	. .	. .	. .	1	2	. .
42	Fixed vegetable oils and fats	3	31	. .	371	278	302
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin	. .	. .	. .	. .	. .	. .
51	Chemical elements and compounds	. .	. .	. .	1,849	1,125	2,065
52	Mineral tar and crude chemicals from coal, petroleum and natural gas	161	66	56	19	1	. .
53	Dyeing, tanning and colouring materials	. .	. .	. .	88	140	130
54	Medicinal and pharmaceutical products	10	. .	2	148	176	191
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations	6	7	11	273	283	252
56	Fertilisers, manufactured	. .	. .	. .	113	553	625
57	Explosives and pyrotechnic products	. .	. .	. .	44	56	27
58	Plastic materials, regenerated cellulose and artificial resins	. .	. .	. .	920	994	1,203
59	Chemical materials and products, n.e.s.	. .	. .	. .	259	128	73
61	Leather, leather manufactures, n.e.s., and dressed fur skins	. .	. .	. .	175	126	127
62	Rubber manufactures, n.e.s.	. .	. .	. .	1,378	1,537	1,320
63	Wood and cork manufactures (except furniture)	. .	2	1	276	200	359
64	Paper, paperboard and manufactures thereof	. .	. .	. .	169	325	395
65	Textile yarn, fabrics, made-up articles and related products	18	15	11	7,127	6,574	7,828
66	Non-metallic mineral manufactures, n.e.s.	. .	. .	. .	1,020	1,276	1,814
67	Iron and steel	. .	. .	. .	815	797	1,214
68	Non-ferrous metals	. .	. .	. .	26	43	33
69	Manufactures of metal, n.e.s.	. .	. .	3	868	1,020	1,256
71	Machinery (except electric)	1	. .	. .	15,553	14,786	17,481
72	Electric machinery, apparatus and appliances	. .	. .	. .	1,827	3,713	6,017
73	Transport equipment	. .	. .	. .	3,961	5,172	13,413
81	Sanitary, plumbing, heating and lighting fixtures and fittings	. .	. .	. .	213	220	259
82	Furniture	. .	. .	. .	176	189	296
83	Travel goods, handbags and similar articles	. .	. .	. .	150	197	344
84	Clothing and clothing accessories; articles of knitted or crocheted fabric	. .	. .	. .	1,515	1,591	1,686
85	Footwear, gaiters, and similar articles and parts therefor	. .	. .	. .	2,031	2,943	3,481
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks	. .	1	. .	1,292	1,469	1,933
89	Miscellaneous manufactured articles, n.e.s.	1	1	9	2,329	2,552	3,386
9A	Commodities and transactions of merchandise trade, not elsewhere classified	159	105	99	859	905	1,253
	Total merchandise	*61,737*	*56,616*	*55,427*	*49,320*	*52,870*	*72,290*
9B	Commodities and transactions not included in merchandise trade	26	13	3	381	308	426
	Grand total	**61,763**	**56,629**	**55,430**	**49,701**	**53,178**	**72,716**

IMPORTS, BY COUNTRY OF ORIGIN: DIVISIONS OF THE AUSTRALIAN IMPORT COMMODITY CLASSIFICATION, 1965–66 TO 1967–68—*continued*

($'000)

Division No.	*Description*	*Japan*			*Malaysia(a)*		
		1965–66	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
00	Live animals	..	..	..	..	..	..
01	Meat and meat preparations	8	6	9	..	..	..
02	Dairy products and eggs	..	..	..	..	..	..
03	Fish and fish preparations	7,284	7,361	7,677	33	167	135
04	Cereal grains and cereal preparations	45	91	105	1	..	1
05	Fruit and vegetables	196	215	303	74	91	79
06	Sugar and sugar preparations and honey	7	27	58	..	..	..
07	Coffee, tea, cocoa, spices and manufactures thereof	625	1,025	1,412	1,037	1,214	893
08	Feeding-stuff for animals (except unmilled cereals)	..	..	159	1	..	..
09	Miscellaneous preparations chiefly for food	70	95	70	15	4	3
11	Beverages	12	14	18	..	..	..
12	Tobacco and tobacco manufactures	2	12	1	..	..	..
21	Hides, skins and fur skins, undressed	44	13	30	..	2	1
22	Oil-seeds, oil nuts and oil kernels	..	..	..	..	..	1
23	Crude rubber (including synthetic and reclaimed)	1,632	2,270	1,476	13,614	13,557	11,794
24	Wood, timber and cork	151	100	116	8,244	7,939	12,558
25	Pulp and waste paper	423	199	106	..	..	..
26	Textile fibres and their waste	2,510	2,729	2,868	2	..	2
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones)	749	1,072	1,588	..	..	..
28	Metalliferous ores and metal scrap	8	26	11	37	29	2
29	Crude animal and vegetable materials, n.e.s.	152	205	458	165	131	102
32	Coal, coke and briquettes	..	..	..	..	..	..
33	Petroleum and petroleum products	4,390	304	693	5,489	1,019	1,012
34	Petroleum gases and other gaseous hydrocarbons	..	..	..	..	..	..
41	Animal oils and fats	1,088	714	176	..	..	..
42	Fixed vegetable oils and fats	837	1,753	617	779	662	550
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin	6	13	105	..	..	..
51	Chemical elements and compounds	10,859	14,539	13,033	11	..	4
52	Mineral tar and crude chemicals from coal, petroleum and natural gas	242	399	231	..	..	..
53	Dyeing, tanning and colouring materials	254	448	543	..	..	..
54	Medicinal and pharmaceutical products	194	280	316	8	6	1
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations	36	65	56	17	27	35
56	Fertilisers, manufactured	473	1,499	3,656	..	..	..
57	Explosives and pyrotechnic products	103	96	135	..	79	..
58	Plastic materials, regenerated cellulose and artificial resins	6,604	7,291	10,667	..	..	..
59	Chemical materials and products, n.e.s.	525	602	906	4	5	4
61	Leather, leather manufactures, n.e.s., and dressed fur skins	392	694	448	7	..	..
62	Rubber manufactures, n.e.s.	3,696	3,793	4,579	182	222	289
63	Wood and cork manufactures (except furniture)	2,264	2,212	2,375	32	35	215
64	Paper, paperboard and manufactures thereof	4,062	4,756	6,116	..	..	..
65	Textile yarn, fabrics, made-up articles and related products	63,902	70,347	75,539	40	107	191
66	Non-metallic mineral manufactures, n.e.s.	9,363	9,260	10,066	..	4	5
67	Iron and steel	35,534	24,448	29,946	..	5	..
68	Non-ferrous metals	682	865	1,278	1,588	2,227	391
69	Manufactures of metal, n.e.s.	12,640	10,001	10,376	21	9	3
71	Machinery (except electric)	20,007	26,899	30,141	10	13	4
72	Electric machinery, apparatus and appliances	18,645	17,059	18,472	..	8	1
73	Transport equipment	34,008	47,149	62,933	3	27	85
81	Sanitary, plumbing, heating and lighting fixtures and fittings	210	205	348	..	..	..
82	Furniture	757	557	780	1	3	1
83	Travel goods, handbags and similar articles	1,592	1,712	1,698	1	..	..
84	Clothing and clothing accessories; articles of knitted or crocheted fabric	1,856	2,480	2,492	..	1	2
85	Footwear, gaiters, and similar articles and parts therefor	209	556	900	5	5	6
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks	7,723	8,297	10,426	9	6	9
89	Miscellaneous manufactured articles, n.e.s.	14,141	15,304	19,007	71	32	74
9A	Commodities and transactions of merchandise trade, not elsewhere classified	4,852	5,632	7,311	121	164	115
	Total merchandise	*276,061*	*295,688*	*342,831*	*31,620*	*27,801*	*28,568*
9B	Commodities and transactions not included in merchandise trade	4,112	356	479	304	184	274
	Grand total	**280,173**	**296,044**	**343,310**	**31,924**	**27,985**	**28,842**

(*a*) Includes Singapore to 30 September 1965.

IMPORTS, BY COUNTRY OF ORIGIN: DIVISIONS OF THE AUSTRALIAN IMPORT COMMODITY CLASSIFICATION, 1965–66 TO 1967–68—*continued*

($'000)

Division No.	Description	*Netherlands*			*New Zealand*		
		1965–66	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
00	Live animals	..	..	..	1,225	1,527	1,991
01	Meat and meat preparations	9	7	5	106	92	376
02	Dairy products and eggs	430	420	488	308	313	318
03	Fish and fish preparations	378	344	279	1,388	1,528	1,578
04	Cereal grains and cereal preparations	200	253	302	203	387	914
05	Fruit and vegetables	423	498	648	2,844	2,206	3,030
06	Sugar and sugar preparations and honey	130	128	177	547	602	796
07	Coffee, tea, cocoa, spices and manufactures thereof	740	848	541	7	30	88
08	Feeding-stuff for animals (except unmilled cereals)	..	5	8	349	132	288
09	Miscellaneous preparations chiefly for food	135	159	268	46	60	26
11	Beverages	29	28	59	1	6	25
12	Tobacco and tobacco manufactures	2,269	2,758	3,237	..	..	..
21	Hides, skins and fur skins, undressed	23	11	21	455	380	440
22	Oil-seeds, oil nuts and oil kernels	111	42	27	52	48	149
23	Crude rubber (including synthetic and reclaimed)	371	617	273	..	..	..
24	Wood, timber and cork	..	..	..	2,219	2,310	3,323
25	Pulp and waste paper	..	..	..	6,291	6,687	5,671
26	Textile fibres and their waste	1,208	924	928	2,860	2,507	2,105
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones)	11	7	152	27	31	36
28	Metalliferous ores and metal scrap	1	1	59	231	816	1,802
29	Crude animal and vegetable materials, n.e.s.	201	210	176	1,270	1,281	2,143
32	Coal, coke and briquettes	5	6	3	1	..	..
33	Petroleum and petroleum products	515	62	163	158	150	1
34	Petroleum gases and other gaseous hydrocarbons	..	..	..	..	..	..
41	Animal oils and fats	4	..	1	311	222	334
42	Fixed vegetable oils and fats	192	121	97	1	1	1
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin	299	358	461	7	8	10
51	Chemical elements and compounds	2,742	2,562	3,472	510	562	719
52	Mineral tar and crude chemicals from coal, petroleum and natural gas	9	8	9	..	..	..
53	Dyeing, tanning and colouring materials	352	230	309	21	39	53
54	Medicinal and pharmaceutical products	389	961	785	329	427	497
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations	237	163	184	15	123	72
56	Fertilisers, manufactured	11	9	771	34	17	14
57	Explosives and pyrotechnic products	..	..	..	..	..	1
58	Plastic materials, regenerated cellulose and artificial resins	1,871	3,810	3,124	98	35	118
59	Chemical materials and products, n.e.s.	885	787	696	62	112	77
61	Leather, leather manufactures, n.e.s., and dressed fur skins	8	8	8	51	112	182
62	Rubber manufactures, n.e.s.	57	60	303	220	293	836
63	Wood and cork manufactures (except furniture)	40	67	98	29	31	186
64	Paper, paperboard and manufactures thereof	901	945	1,157	18,496	16,043	18,773
65	Textile yarn, fabrics, made-up articles and related products	2,859	2,887	3,348	833	948	3,629
66	Non-metallic mineral manufactures, n.e.s.	858	629	468	135	258	302
67	Iron and steel	84	59	59	2	62	15
68	Non-ferrous metals	174	238	278	118	72	181
69	Manufactures of metal, n.e.s.	595	506	683	124	164	416
71	Machinery (except electric)	3,518	4,059	5,365	1,216	1,605	1,947
72	Electric machinery, apparatus and appliances	5,994	6,383	6,752	521	1,639	2,167
73	Transport equipment	6,532	9,462	7,073	82	344	711
81	Sanitary, plumbing, heating and lighting fixtures and fittings	58	56	66	22	26	49
82	Furniture	40	17	16	23	49	131
83	Travel goods, handbags and similar articles	8	3	6	81	160	298
84	Clothing and clothing accessories; articles of knitted or crocheted fabric	59	27	40	227	109	270
85	Footwear, gaiters, and similar articles and parts therefor	..	2	3	96	104	129
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks	1,135	1,184	1,234	50	74	141
89	Miscellaneous manufactured articles, n.e.s.	1,922	2,077	2,410	834	980	1,295
9A	Commodities and transactions of merchandise trade, not elsewhere classified	944	855	1,048	1,020	894	1,026
	Total merchandise	*39,969*	*45,862*	*48,140*	*46,158*	*46,607*	*59,679*
9B	Commodities and transactions not included in merchandise trade	254	1,194	197	701	667	1,969
	Grand total	**40,223**	**47,056**	**48,337**	**46,859**	**47,274**	**61,648**

IMPORTS, BY COUNTRY OF ORIGIN: DIVISIONS OF THE AUSTRALIAN IMPORT COMMODITY CLASSIFICATION, 1965–66 TO 1967–68—*continued*

($'000)

Division No.	*Description*	*Papua and New Guinea*			*South Africa*		
		1965–66	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
00	Live animals	..	..	..	..	..	..
01	Meat and meat preparations	..	..	..	..	..	..
02	Dairy products and eggs	..	..	..	..	..	..
03	Fish and fish preparations	31	24	53	2,708	2,091	2,791
04	Cereal grains and cereal preparations	..	..	..	10	4	..
05	Fruit and vegetables	174	142	237	30	60	25
06	Sugar and sugar preparations and honey	..	..	..	1	..	..
07	Coffee, tea, cocoa, spices and manufactures thereof	4,866	6,110	6,137	1	2	11
08	Feeding-stuff for animals (except unmilled cereals)	..	..	..	1,674	2,170	2,329
09	Miscellaneous preparations chiefly for food	..	..	..	..	2	..
11	Beverages	..	..	..	2	3	8
12	Tobacco and tobacco manufactures	..	..	..	2,087	2,991	2,601
21	Hides, skins and fur skins, undressed	531	503	286	6	2	3
22	Oil-seeds, oil nuts and oil kernels	5,166	4,321	4,961	62	25	21
23	Crude rubber (including synthetic and reclaimed)	2,419	2,516	1,966	..	..	..
24	Wood, timber and cork	860	916	1,017	..	..	..
25	Pulp and waste paper	..	..	..	..	..	..
26	Textile fibres and their waste	..	..	..	111	70	65
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones)	..	..	..	2,560	2,901	3,333
28	Metalliferous ores and metal scrap	57	96	140	344	120	108
29	Crude animal and vegetable materials, n.e.s.	13	24	31	211	188	158
32	Coal, coke and briquettes	..	..	..	68	71	72
33	Petroleum and petroleum products	..	..	..	16	30	28
34	Petroleum gases and other gaseous hydrocarbons	..	..	..	..	..	..
41	Animal oils and fats	..	..	..	57	60	59
42	Fixed vegetable oils and fats	180	110	208	57	140	410
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin	..	..	..	5	3	..
51	Chemical elements and compounds	..	..	..	801	672	565
52	Mineral tar and crude chemicals from coal, petroleum and natural gas	..	..	..	..	..	..
53	Dyeing, tanning and colouring materials	..	..	..	447	485	392
54	Medicinal and pharmaceutical products	..	..	..	7	9	4
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations	..	..	..	33	10	4
56	Fertilisers, manufactured	..	..	..	..	..	..
57	Explosives and pyrotechnic products	..	..	..	..	3	..
58	Plastic materials, regenerated cellulose and artificial resins	..	..	..	25	12	3
59	Chemical materials and products, n.e.s.	..	..	..	25	3	17
61	Leather, leather manufactures, n.e.s., and dressed fur skins	..	..	..	4	2	..
62	Rubber manufactures, n.e.s.	1	..	..	343	..	81
63	Wood and cork manufactures (except furniture)	1,783	1,904	2,282	2	3	42
64	Paper, paperboard and manufactures thereof	..	..	..	40	86	90
65	Textile yarn, fabrics, made-up articles and related products	..	1	..	317	1	5
66	Non-metallic mineral manufactures, n.e.s.	1	..	19	1,244	1,036	1,198
67	Iron and steel	..	..	..	1,856	1,893	2,555
68	Non-ferrous metals	..	..	19	38	89	137
69	Manufactures of metal, n.e.s.	1	2	23	295	369	403
71	Machinery (except electric)	1	3	4	131	484	959
72	Electric machinery, apparatus and appliances	2	3	6	120	162	196
73	Transport equipment	9	4	9	762	74	31
81	Sanitary, plumbing, heating and lighting fixtures and fittings	..	..	..	5	10	7
82	Furniture	..	..	..	1	..	..
83	Travel goods, handbags and similar articles	..	..	..	1	5	6
84	Clothing and clothing accessories; articles of knitted or crocheted fabric	..	..	..	5	3	12
85	Footwear, gaiters, and similar articles and parts therefor	..	..	..	..	..	..
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks	7	8	29	118	59	24
89	Miscellaneous manufactured articles, n.e.s.	44	33	31	73	78	79
9A	Commodities and transactions of merchandise trade, not elsewhere classified	319	262	257	547	527	580
	Total merchandise	*16,463*	*16,980*	*17,716*	*17,251*	*17,008*	*19,411*
9B	Commodities and transactions not included in merchandise trade	1,170	1,192	1,451	150	82	95
	Grand total	**17,633**	**18,172**	**19,167**	**17,401**	**17,090**	**19,506**

IMPORTS, BY COUNTRY OF ORIGIN: DIVISIONS OF THE AUSTRALIAN IMPORT COMMODITY CLASSIFICATION, 1965–66 TO 1967–68—*continued*

($'000)

Division No.	*Description*	*Sweden*			*Switzerland*		
		1965–66	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
00	Live animals	..	..	..	..	..	..
01	Meat and meat preparations	..	..	..	1	6	7
02	Dairy products and eggs	9	32	97	143	127	152
03	Fish and fish preparations	58	57	39	..	..	..
04	Cereal grains and cereal preparations	113	169	297	9	10	5
05	Fruit and vegetables	10	20	7	10	18	17
06	Sugar and sugar preparations and honey	..	..	..	6	..	..
07	Coffee, tea, cocoa, spices and manufactures thereof	..	..	..	29	48	36
08	Feeding-stuff for animals (except unmilled cereals)	..	..	..	..	..	..
09	Miscellaneous preparations chiefly for food	1	5	9	32	26	54
11	Beverages	1	1	2	..	4	10
12	Tobacco and tobacco manufactures	..	..	..	8	10	13
21	Hides, skins and fur skins, undressed	21	29	20	..	..	..
22	Oil-seeds, oil nuts and oil kernels	..	..	..	..	..	..
23	Crude rubber (including synthetic and reclaimed)	..	..	..	..	..	..
24	Wood, timber and cork	76	109	53	..	..	..
25	Pulp and waste paper	4,517	5,332	4,001	12	23	..
26	Textile fibres and their waste	723	755	503	11	13	2
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones)	27	42	41	3	7	1
28	Metalliferous ores and metal scrap	15	..	..	..	..	..
29	Crude animal and vegetable materials, n.e.s.	1	1	..	53	68	62
32	Coal, coke and briquettes	..	..	..	..	..	..
33	Petroleum and petroleum products	1	1	1	10	12	18
34	Petroleum gases and other gaseous hydrocarbons	..	..	..	..	..	..
41	Animal oils and fats	..	..	..	..	..	..
42	Fixed vegetable oils and fats	322	203	559	..	..	..
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin	13	13	13	..	..	..
51	Chemical elements and compounds	387	512	601	3,505	3,052	3,690
52	Mineral tar and crude chemicals from coal, petroleum and natural gas	..	..	..	..	2	4
53	Dyeing, tanning and colouring materials	9	10	3	2,421	3,079	2,864
54	Medicinal and pharmaceutical products	165	155	232	6,371	5,959	8,383
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations	6	11	9	608	525	681
56	Fertilisers, manufactured	..	..	..	..	..	..
57	Explosives and pyrotechnic products	31	43	1	..	..	..
58	Plastic materials, regenerated cellulose and artificial resins	146	90	110	313	423	413
59	Chemical materials and products, n.e.s.	228	195	207	200	255	187
61	Leather, leather manufactures, n.e.s., and dressed fur skins	67	135	185	11	17	8
62	Rubber manufactures, n.e.s.	90	192	214	19	25	58
63	Wood and cork manufactures (except furniture)	592	359	386	17	18	40
64	Paper, paperboard and manufactures thereof	6,056	6,098	6,181	145	169	196
65	Textile yarn, fabrics, made-up articles and related products	326	305	364	3,939	3,900	4,391
66	Non-metallic mineral manufactures, n.e.s.	418	511	617	192	218	177
67	Iron and steel	3,264	3,251	4.775	27	76	373
68	Non-ferrous metals	130	444	135	139	133	139
69	Manufactures of metal, n.e.s.	3,624	3,833	3,106	459	546	529
71	Machinery (except electric)	14,839	13,042	13,318	10,915	9,791	10,206
72	Electric machinery, apparatus and appliances	11,672	12,201	8,761	3,199	3,998	4,191
73	Transport equipment	776	680	1,005	229	258	662
81	Sanitary, plumbing, heating and lighting fixtures and fittings	144	138	93	4	5	18
82	Furniture	26	44	60	2	3	10
83	Travel goods, handbags and similar articles	3	8	16	6	6	5
84	Clothing and clothing accessories; articles of knitted or crocheted fabric	19	14	12	446	382	407
85	Footwear, gaiters, and similar articles and parts therefor	2	2	3	108	135	152
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks	348	415	368	6,991	6,175	7,272
89	Miscellaneous manufactured articles, n.e.s.	303	292	354	1,579	1,152	1,468
9A	Commodities and transactions of merchandise trade, not elsewhere classified	2,110	885	837	572	723	650
	Total merchandise	*51,688*	*50,636*	*47,595*	*42,744*	*41,398*	*47,554*
9B	Commodities and transactions not included in merchandise trade	99	214	2,583	267	379	224
	Grand total	**51,787**	**50,850**	**50,178**	**43,011**	**41,777**	**47,778**

IMPORTS, BY COUNTRY OF ORIGIN: DIVISIONS OF THE AUSTRALIAN IMPORT COMMODITY CLASSIFICATION, 1965–66 TO 1967–68—*continued*

($'000)

Division No.	*Description*	*United Kingdom*			*United States of America*		
		1965–66	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
00	Live animals	503	927	621	53	87	97
01	Meat and meat preparations	84	83	153	77	42	27
02	Dairy products and eggs	26	27	38	57	61	96
03	Fish and fish preparations	7,397	6,280	4,681	678	1,147	752
04	Cereal grains and cereal preparations	651	866	870	678	475	532
05	Fruit and vegetables	825	1,101	1,241	3,731	2,779	3,000
06	Sugar and sugar preparations and honey	660	613	623	84	56	66
07	Coffee, tea, cocoa, spices and manufactures thereof	353	405	624	463	608	509
08	Feeding-stuff for animals (except unmilled cereals)	215	2,720	66	2,374	2,151	3,586
09	Miscellaneous preparations chiefly for food	426	503	626	246	611	534
11	Beverages	9,100	7,863	8,913	148	151	270
12	Tobacco and tobacco manufactures	1,377	1,215	1,215	17,305	18,287	12,767
21	Hides, skins and fur skins, undressed	88	87	49	205	206	265
22	Oil-seeds, oil nuts and oil kernels	56	64	123	3,454	252	2,133
23	Crude rubber (including synthetic and reclaimed)	705	748	938	5,094	5,111	5,461
24	Wood, timber and cork	56	87	82	8,556	8,847	9,176
25	Pulp and waste paper	3	4	..	3,232	2,724	3,867
26	Textile fibres and their waste	5,503	6,239	4,472	7,533	5,655	6,362
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones)	1,348	1,384	1,360	12,806	14,251	13,042
28	Metalliferous ores and metal scrap	79	180	55	76	315	517
29	Crude animal and vegetable materials, n.e.s.	822	1,111	883	2,580	2,613	2,690
32	Coal, coke and briquettes	1	1	3	132	201	135
33	Petroleum and petroleum products	2,035	1,460	1,581	7,370	6,741	6,125
34	Petroleum gases and other gaseous hydrocarbons	..	1	..	10	21	38
41	Animal oils and fats	112	93	80	13	14	21
42	Fixed vegetable oils and fats	513	762	511	3,295	2,060	1,871
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin	272	329	344	353	419	375
51	Chemical elements and compounds	20,825	22,832	20,994	28,317	36,233	33,150
52	Mineral tar and crude chemicals from coal, petroleum and natural gas	154	59	71	2,394	2,137	1,916
53	Dyeing, tanning and colouring materials	6,478	7,503	6,508	1,952	2,430	2,559
54	Medicinal and pharmaceutical products	14,093	15,013	14,541	5,691	6,379	6,368
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations	4,518	5,092	4,163	3,392	3,953	3,917
56	Fertilisers, manufactured	389	899	432	3,555	5,113	4,120
57	Explosives and pyrotechnic products	1,513	1,696	2 754	2,664	2,543	3,269
58	Plastic materials, regenerated cellulose and artificial resins	26,372	26,448	27,719	16,710	16,440	18,201
59	Chemical materials and products, n.e.s.	13,937	16,969	14,032	12,281	14,949	19,945
61	Leather, leather manufactures, n.e.s., and dressed fur skins	1,671	1,909	1,798	997	742	972
62	Rubber manufactures, n.e.s.	10,771	11,002	12,834	8,308	7,382	12,167
63	Wood and cork manufactures (except furniture)	711	792	1,001	349	341	509
64	Paper, paperboard and manufactures thereof	11,512	11,023	9,828	12,167	13,846	14,256
65	Textile yarn, fabrics, made-up articles and related products	47,924	42,537	38,079	21,287	23,663	23,281
66	Non-metallic mineral manufactures, n.e.s.	18,539	17,800	16,215	7,845	8,040	9,854
67	Iron and steel	21,913	16,666	20,176	7,592	6,968	8,471
68	Non-ferrous metals	8,539	7,398	7,489	3,610	2,819	2,785
69	Manufactures of metal, n.e.s.	25,641	24,831	25,011	15,224	15,273	18,587
71	Machinery (except electric)	200,363	181,700	178,336	200,588	201,804	224,313
72	Electric machinery, apparatus and appliances	67,242	66,122	64,235	40,948	48,303	60,832
73	Transport equipment	121,044	100,432	122,648	146,376	179,452	183,736
81	Sanitary, plumbing, heating and lighting fixtures and fittings	1,665	1,637	1,690	215	312	451
82	Furniture	1,020	592	650	340	293	379
83	Travel goods, handbags and similar articles	416	415	388	245	229	200
84	Clothing and clothing accessories; articles of knitted or crocheted fabric	6,142	5,636	5,609	1,037	1,115	1,332
85	Footwear, gaiters, and similar articles and parts therefor	744	1,044	1,159	42	36	68
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks	23,596	24,655	24,633	22,457	27,525	29,810
89	Miscellaneous manufactured articles, n.e.s.	37,883	42,090	41,425	27,110	32,361	32,565
9A	Commodities and transactions of merchandise trade, not elsewhere classified	22,865	28,455	23,788	22,745	34,429	36,116
	Total merchandise	*751,691*	*718,396*	*718,355*	*697,041*	*770,995*	*828,443*
9B	Commodities and transactions not included in merchandise trade	7,060	5,415	4.655	6,556	10,268	12,442
	Grand total	**758,751**	**723,811**	**723,010**	**703,597**	**781,263**	**840,886**

Trade with major groups of countries

Australia's trade with major groups of countries is shown in the following table. Particulars of Australia's balance of payments with countries in these groups are shown on page 363.

TRADE OF AUSTRALIA, BY MAJOR GROUP OF COUNTRIES, 1965-66 TO 1967-68
($'000 f.o.b.)

	1965–66	*1966–67*	*1967–68*
STERLING AREA			
Exports to—			
United Kingdom	473,358	404,958	426,314
Other countries	554,322	727,208	648,022
Total	1,027,680	1,132,166	1,074,336
Imports from—			
United Kingdom	758,751	723,811	723,010
Other countries	335,293	371,647	397,555
Total	1,094,044	1,095,458	1,120,565
Excess of exports (+) or imports (−)	−66,364	+36,708	−46,229
NON-STERLING COUNTRIES—NORTH AMERICA			
Exports to—			
Canada	43,171	51,690	53,541
United States of America(*a*)	343,747	369,012	413,974
Total	386,918	420,702	467,515
Imports from—			
Canada	107,972	117,199	140,518
United States of America(*a*)	703,775	781,566	841,233
Total	811,747	898,765	981,751
Excess of exports (+) or imports (−)	−424,829	−478,063	−514,236
OTHER NON-STERLING COUNTRIES			
Exports to—			
European Economic Community	438,929	418,804	373,194
European Free Trade Association(*b*)	29,991	39,015	32,054
Other countries—			
Japan	470,410	586,437	642,072
Eastern Europe, China (mainland), etc.	188,727	189,389	192,019
Other	178,298	237,412	263,484
Total	1,306,355	1,471,057	1,502,823
Imports from—			
European Economic Community	372,282	379,492	426,681
European Free Trade Association(*b*)	138,518	137,113	145,567
Other countries—			
Japan	280,173	296,044	343,310
Eastern Europe, China (mainland), etc.	40,685	41,579	40,753
Other	202,043	196,890	205,846
Total	1,033,701	1,051,118	1,162,157
Excess of exports (+) or imports (−)	+272,654	+419,939	+340,666
ALL GROUPS			
Total exports	2,720,953	3,023,925	3,044,675
Total imports	2,939,492	3,045,341	3,264,473
Excess of exports (+) or imports (−)	−218,539	−21,416	−219,798

(*a*) Includes United States of America Territories and Dependencies. (*b*) Other than United Kingdom.

Countries constituting the several groups are listed below.

- STERLING AREA—
  - Antarctica
  - Bahama Is
  - Bahrain
  - Barbados
  - Bermuda
  - Botswana
  - British Indian Ocean Territory
  - Brunei
  - Ceylon
  - Christmas Is
  - Cocos Is
  - Cook Is
  - Cyprus
  - Falkland Is
  - Fiji
  - Gambia
  - Ghana
  - Gibraltar
  - Gilbert and Ellice Is
  - Guyana
  - Honduras (British)
  - Hong Kong
  - Iceland
  - India
  - Ireland
  - Jamaica
  - Jordan
  - Kenya
  - Kuwait
  - Leeward Is
  - Lesotho
  - Libya
  - Malawi
  - Malaysia
  - Maldive Is
  - Malta
  - Mauritius
  - Muscat and Oman
  - Nauru
  - New Zealand
  - Nigeria
  - Niue and Tokelau Is
  - Norfolk Is.
  - Pakistan
  - Papua and New Guinea
  - Qatar
  - Rhodesia
  - Ross Dependency
  - St Helena and Ascension
  - Seychelles
  - Sierra Leone
  - Singapore
  - Solomon Is
  - South Africa
  - South Arabia, Federation of
  - South Arabia, Non-federated States
  - South West Africa
  - Swaziland
  - Tanzania
  - Tonga
  - Trinidad and Tobago
  - Trucial States
  - Uganda
  - United Kingdom
  - Virgin Is (British)
  - Western Samoa
  - Windward Is
  - Zambia
- NON-STERLING COUNTRIES—
  - NORTH AMERICA—
    - Canada
    - United States of America and Dependencies (Guam, Okinawa, Puerto Rico, Samoa, Virgin Is and other U.S. Pacific Is)
  - EUROPEAN ECONOMIC COMMUNITY—
    - Algeria
    - Belgium-Luxembourg
    - Burundi
    - Cameroon
    - Central African Republic
    - Chad
    - Congo-Brazzaville
    - Congo Republic
    - Dahomey
    - France
    - Gabon
    - Germany, Federal Republic of
    - Greece
    - Guiana (French)
    - Italy
    - Ivory Coast
    - Malagasy, Republic of
    - Mali
    - Mauritania
    - Netherlands
    - New Caledonia
    - Niger
    - Polynesia (French)
    - Reunion and Southern Is
    - Rwanda
    - St Pierre and Miquelon
    - Senegal
    - Somaliland (French)
    - Togo
    - Upper Volta
    - Wallis and Futuna Is
    - West Indies (French)
  - EUROPEAN FREE TRADE ASSOCIATION(a)—
    - Angola
    - Austria
    - Cape Verde Is
    - Denmark
    - Finland
    - Guinea (Portuguese)
    - Macao
    - Mozambique
    - Norway
    - Portugal
    - Sweden
    - Switzerland
    - Timor
  - EASTERN EUROPE, CHINA (MAINLAND), ETC.—
    - Albania
    - Bulgaria
    - China (mainland)
    - Czechoslovakia
    - Germany (East)
    - Hungary
    - Korea (North)
    - Poland
    - Romania
    - U.S.S.R.
    - Vietnam (North)
  - OTHER—
    - Afghanistan
    - Antilles
    - Argentina
    - Bhutan
    - Bolivia
    - Brazil
    - Cambodia
    - Chile
    - China, Republic of (Formosa)
    - Colombia
    - Costa Rica
    - Cuba
    - Dominican Republic
    - Ecuador
    - El Salvador
    - Ethiopia
    - Guatemala
    - Guinea
    - Haiti
    - Honduras (not British)
    - Indonesia
    - Iran
    - Iraq
    - Israel
    - Japan
    - Korea, Republic of
    - Laos
    - Lebanon
    - Liberia
    - Mexico
    - Morocco
    - Nepal
    - New Hebrides
    - Nicaragua
    - Panama
    - Paraguay
    - Peru
    - Philippines
    - Saudi Arabia
    - Somalia
    - Spain
    - Spanish Equatorial (West) Africa
    - Sudan
    - Surinam
    - Syria
    - Thailand
    - Tunisia
    - Turkey
    - United Arab Republic
    - Uruguay
    - Venezuela
    - Vietnam, Republic of
    - Yemen
    - Yugoslavia

(a) Other than United Kingdom.

Trade with the United Kingdom

Since 1908, permanent resident Commissioners appointed by the British Board of Trade have been located in Australia for the purpose of advising manufacturers and merchants in Britain about Australian trade affairs. Particulars of British trade representation in Australia are given in the chapter International Relations. From 8 August 1907 the Commonwealth Customs Tariffs have provided preferential rates of customs duties on certain goods the produce or manufacture of the United Kingdom, with the object of assisting the British manufacturer to retain or improve his position in this market in relation to other countries. The main provisions in these Acts relating to preference are dealt with on pages 304–5 in this chapter. For details of exports to and imports from the United Kingdom, by divisions of the Australian Export and Import Commodity Classifications, *see* tables on pages 334 and 345 respectively.

Trade with eastern countries

Details of exports to and imports from eastern countries are shown in the following table. Further information for principal eastern countries, by divisions of the Australian Export and Import Commodity Classifications, is shown in the tables on pages 326–35 and 336–45 respectively.

TRADE OF AUSTRALIA WITH EASTERN COUNTRIES, BY COUNTRY OF CONSIGNMENT OR ORIGIN, 1965-66 TO 1967-68

($'000 f.o.b.)

	Exports			*Imports*		
Country	*1965–66*	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
Brunei	213	252	9,351	9,353	11,484	15,410
Burma	4,165	4,491	2,797	91	258	187
Cambodia	134	436	254	30	23	29
Ceylon	17,408	15,787	16,173	17,563	15,535	15,014
China (mainland)	106,541	128,613	126,459	23,460	26,148	23,592
China, Republic of (Formosa)	16,227	18,842	20,388	4,270	4,801	8,590
Hong Kong	58,774	64,260	59,876	25,358	34,193	36,729
India	28,001	58,339	65,466	35,012	33,889	35,296
Indonesia	5,359	6,938	13,870	61,763	56,629	55,430
Japan	470,410	586,437	642,072	280,173	296,044	343,310
Korea (North)	5,446	6,378	1,928	. .	. .	2
Korea, Republic of	4,849	8,088	8,417	1,761	1,428	1,556
Laos	127	70	149	. .	. .	. .
Macao	11	193	33	55	49	38
Malaysia	(*a*)49,770	61,781	56,485	(*a*)31,924	27,985	28,842
Nepal	3	77	96	1	1	14
Pakistan	7,383	53,143	5,944	16,390	17,999	14,562
Philippines	23,990	32,801	41,722	2,518	2,793	3,555
Singapore	(*b*)34,004	56,486	58,138	(*b*)3,699	8,708	8,564
Thailand	15,573	23,722	23,494	1,150	1,666	1,969
Timor	300	217	262	55	. .	4
Vietnam (North)	65	. .	. .	. .	. .	. .
Vietnam, Republic of	6,520	11,837	23,198	41	101	20
Total	**855,273**	**1,139,188**	**1,176,572**	**514,667**	**539,734**	**592,713**

(*a*) Includes Singapore to 30 September 1965. (*b*) Included with Malaysia to 30 September 1965.

Overseas trade at customs ports

The following table shows the value of exports and imports at customs ports of Australia during the year 1967–68, and the totals for each State and Territory.

OVERSEAS TRADE: CUSTOMS PORTS, AUSTRALIA, 1967-68

($'000 f.o.b.)

Port or customs station	*Exports*	*Imports*
New South Wales—		
Sydney	613,558	1,173,927
Kingsford-Smith airport	83,725	110,546
Coffs Harbour (including Ballina)	296	..
Botany Bay (Kurnell)	6,092	49,270
Newcastle (including Port Stephens)	168,124	30,971
Port Kembla	71,386	25,900
Byron Bay	1	..
Parcels post, Sydney	(*a*)	14,717
Total, New South Wales	*943,182*	*1,405,331*
Victoria—		
Melbourne	596,644	978,788
Melbourne airport	3,685	64,794
Geelong	57,363	55,348
Portland	26,783	5,399
Westernport	1,280	15,296
Parcels post, Melbourne	(*a*)	11,116
Total, Victoria	*685,755*	*1,130,741*
Queensland—		
Brisbane	279,871	203,643
Brisbane airport	3,952	6,283
Bowen	6,440	3
Bundaberg	14,657	148
Cairns (including airport)	16,594	2,453
Gladstone	61,735	9,783
Innisfail	18,923	3
Mackay	36,329	1,142
Maryborough (including Urongan)	..	171
Rockhampton (including airport and Port Alma)	34,196	1,802
Thursday Island	1,309	206
Townsville (including airport)	88,931	9,666
Weipa	(*a*)	177
Parcels post, Brisbane	(*a*)	1,288
Total, Queensland	*562,937*	*236,768*
South Australia—		
Port Adelaide (including Stenhouse Bay)	164,752	163,208
Adelaide city (including airport)		21,057
Port Stanvac	1,192	23,594
Ardrossan	524	..
Cape Thevenard	7,055	..
Edithburgh	44	..
Port Augusta	2,544	..
Port Lincoln	12,658	2,432
South Australia—*continued*		
Port Pirie (including Port Germein)	77,414	1,157
Port Wallaroo	4,161	791
Whyalla	12,423	1,102
Parcels post, Adelaide	(*a*)	2,278
Total, South Australia	*282,767*	*215,619*
Western Australia—		
Fremantle	277,139	131,574
Perth (including airport)	1,146	4,519
Kwinana	7,126	30,771
Albany	30,337	3,130
Broome	4,400	7,261
Bunbury	16,730	2,977
Busselton	81	..
Carnarvon	58	..
Derby	1,285	166
Esperance	8,509	1,093
Exmouth (North West Cape)	38	619
Geraldton	33,447	3,488
King Bay (Dampier)	56,532	12,351
Point Samson (including Roebourne)	28	..
Port Hedland	38,226	7,589
Wyndham	179	47
Parcels post, Perth	(*a*)	1,395
Total, Western Australia	*475,261*	*206,980*
Tasmania—		
Hobart (including airport)	35,807	22,961
Burnie (including airport)	15,839	8,097
Devonport (including airport and Ulverstone)	8,099	3,442
Launceston (including airport and Beauty Point)	17,143	10,524
Parcels post	(*b*)	(*b*)
Total, Tasmania	*76,888*	*45,024*
Northern Territory—		
Darwin	17,855	9,407
Australian Capital Territory—		
Canberra	30	14,604
Total	3,044,675	3,264,473

(*a*) Included with main port. (*b*) Included with respective port.

Ships' and aircraft stores

Ships' and aircraft stores loaded on overseas ships and aircraft are excluded from exports. The value of these stores is shown in the table below for each of the years 1965–66 to 1967–68.

STORES LOADED ON BOARD OVERSEAS VESSELS AND AIRCRAFT: AUSTRALIA, 1965–66 TO 1967–68
($'000)

Stores	*1965–66*	*1966–67*	*1967–68*
Cigarettes, cigars and tobacco	814	943	835
Fuel, lubricating oil and lubricants	21,142	22,663	33,805
Foodstuffs for human consumption—			
Meats	3,716	3,691	3,096
Sugar	36	45	72
Milk and cream, preserved	60	91	95
Butter	254	184	116
Cheese	65	95	88
Eggs in shell	471	520	414
Seafoods	462	617	661
Prepared grains	236	225	224
Vegetables	620	780	838
Fruit	306	426	432
Tea	..	26	18
Other	468	579	955
Fodder	159	84	64
Alcoholic beverages	1,513	1,682	1,636
Coal	1	11	6
Other ships' stores	3,828	5,510	5,438
Total	**34,151**	**38,172**	**48,793**

Movement of bullion and specie

The following table shows the values of gold and silver bullion and specie, and of bronze specie, exported from, and imported into, Australia during each of the years 1965–66 to 1967–68.

EXPORTS AND IMPORTS OF BULLION AND SPECIE: AUSTRALIA, 1965–66 TO 1967–68
($ f.o.b.)

	Exports			*Imports*		
	1965–66	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
Gold—Bullion(*a*)	24,417,466	18,080,273	15,298,682	4,177,183	4,161,519	4,323,616
Specie	720	15,460	29,600	9,790	51,561	52,884
Total, gold	*24,418,186*	*18,095,733*	*15,328,282*	*4,186,973*	*4,213,080*	*4,376,500*
Silver—Bullion(*a*)	475,666	3,559,690	22,528,025	141,945	125,560	131,165
Specie	360,285	405,646	949,237	620,346	147,812	162,456
Total, silver	*835,951*	*3,965,336*	*23,477,262*	*762,291*	*273,372*	*293,621*
Other (including bronze and cupro-nickel)—Specie	722,914	76,207	764,282	741,709	31,644	1,537,084
Total—						
Australian produce	25,957,620	22,118,915	39,554,073	..	..	..
Re-exports	19,431	18,361	15,753	..	..	..
Grand total	**25,977,051**	**22,137,276**	**39,569,826**	**5,690,973**	**4,518,096**	**6,207,205**

(*a*) Includes in matte.

The following table shows the exports and imports of bullion and specie to and from various countries during the year 1967–68.

EXPORTS AND IMPORTS OF BULLION AND SPECIE, BY COUNTRY OF CONSIGNMENT OR ORIGIN, 1967-68

($ f.o.b.)

Country	*Exports*			*Imports*		
	Bullion	*Specie*	*Total*	*Bullion*	*Specie*	*Total*
Austria	..	..	..	..	4,706	4,706
Belgium-Luxembourg	..	50	50	..	..	..
Brunei	..	..	..	..	77	77
Canada	..	414	414	..	31	31
Christmas Island	..	62,000	62,000	..	..	..
Denmark	..	..	..	..	525	525
Fiji	10,805	660	11,465	3,412,118	..	3,412,118
Finland	..	..	..	..	214	214
France	78,357	..	78,357	..	533	533
Germany, Federal Republic of	50,085	..	50,085	31,681	..	31,681
Gilbert and Ellice Is	..	4,100	4,100	..	..	..
Hong Kong	15,081,260	1,094	15,082,354	3	396	399
Hungary	..	..	..	..	595	595
India	..	..	..	..	100	100
Israel	..	..	..	..	336	336
Italy	..	..	..	..	2,430	2,430
Japan	7,325,405	..	7,325,405	..	..	..
New Hebrides	..	116,300	116,300	..	14,000	14,000
New Zealand	356,866	24,050	380,916	50,922	1,336,091	1,387,013
Norfolk Is.	..	1,302	1,302	..	..	..
Papua and New Guinea	152	587,844	587,996	942,599	7,720	950,319
Samoa (American)	..	..	..	..	534	534
Samoa (Western)	..	..	..	..	164	164
Singapore	1,053	..	1,053	..	170	170
Solomon Is	..	49,814	49,814	6,363	..	6,363
Switzerland	..	400	400	..	45,627	45,627
Tonga	..	..	..	..	2,033	2,033
United Kingdom	14,917,279	894,314	15,811,593	11,095	12,864	23,959
United States of America	5,445	777	6,222	..	1,686	1,686
Australia re-imported	..	..	..	..	321,592	321,592
Total	37,826,707	1,743,119	39,569,826	4,454,781	1,752,424	6,207,205

Total import clearances, dutiable clearances, and net customs duties collected

The following table shows the value of total import clearances, total dutiable clearances, and the net customs duties collected during each of the years 1963–64 to 1967–68 together with the ratio of total dutiable clearances to total clearances.

TOTAL IMPORT CLEARANCES, DUTIABLE CLEARANCES, AND NET CUSTOMS DUTIES 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Total import clearances	$'000	2,364,386	2,890,332	2,914,520	3,030,897	3,265,116
Total dutiable clearances	„	1,043,201	1,239,936	1,230,459	1,228,320	1,371,780
Total net customs duties collected	„	227,934	263,015	265,590	269,296	306,590
Ratio of dutiable clearances to total clearances	per cent	44.1	42.9	42.2	40.5	42.0
Ratio of duties collected to dutiable clearances	„ „	21.8	21.2	21.6	21.9	22.3

Overseas trade in calendar years

For the purpose of comparison with countries which record overseas trade in calendar years, the following table has been compiled to show estimates of Australian exports and imports for each of the calendar years 1965 to 1968.

OVERSEAS TRADE IN CALENDAR YEARS, AUSTRALIA, 1965 TO 1968
($'000 f.o.b.)

	Merchandise		*Non-merchandise*		*Total*	
Year	*Exports*	*Imports*	*Exports*	*Imports*	*Exports*	*Imports*
1965	2,603,723	2,959,404	79,513	55,789	2,683,236	3,015,193
1966	2,744,164	2,853,901	88,959	41,197	2,833,123	2,895,098
1967	3,004,814	3,085,679	102,820	46,402	3,107,634	3,132,081
1968	3,038,435	3,444,353	112,493	44,940	3,150,928	3,489,293

Excise

Although excise goods have no immediate bearing on overseas trade, the rate of excise duty is in some cases related to the import duty on similar goods. Moreover, as the Excise Acts are administered by the Department of Customs and Excise, it is convenient to publish here the quantities of Australian produce on which excise duty has been paid. Particulars of customs and excise revenue are shown in the chapter Public Finance. The following table shows the quantities of spirits, beer, tobacco, etc., on which excise duty was paid in Australia during the years 1966–67 and 1967–68.

QUANTITY OF SPIRITS, BEER, TOBACCO, ETC. ON WHICH EXCISE DUTY WAS PAID: AUSTRALIA, 1966-67 AND 1967-68

Article	*1966–67*	*1967–68*
	'000 gallons	'000 gallons
Beer	282,357	297,983
	'000 proof gallons	'000 proof gallons
Spirits—		
Brandy	958	1,068
Gin	327	334
Whisky	322	339
Rum	470	514
Liqueurs	66	78
Vodka	125	141
Flavoured spirituous liquors	13	15
Total spirits (potable)	*2,281*	*2,489*
Spirits for—		
Fortifying wine	2,524	2,831
Industrial and scientific purposes	413	365
Manufacture of—		
Essences	129	124
Scents and toilet preparations	114	89
Vinegar	247	215
	'000 lb	'000 lb
Tobacco	7,652	7,390
Cigars	133	154
	'000 lb	'000 lb
Cigarettes—machine-made	47,724	50,938
	'000 gallons	'000 gallons
Petrol—		
Aviation gasoline (by-law)(a)	9,858	8,720
Gasoline(a)	1,754,437	1,863,363
Total petrol	*1,764,295*	*1,872,083*
Mineral turpentine	16	11
Aviation turbine kerosene(a)	103,993	111,950
Other kerosene	(b)	830
Automotive diesel fuel	123,898	145,943
	doz packs '000	doz packs '000
Playing cards	112	121
	60 papers or tubes '000	60 papers or tubes '000
Cigarette papers and tubes	56,859	57,849
	8,640 matches '000	8,640 matches '000
Matches	3,335	3,428
	'000 tons	'000 tons
Coal	18,985	19,299
	'000 doz containers	'000 doz containers
Canned fruit	7,010	6,805

(a) Includes supplies to Commonwealth Government on which excise was paid. During the years 1966–67 and 1967–68 refunds were made on 42,638,000 and 46,662,000 gallons, respectively. (b) Included in aviation turbine kerosene.

OVERSEAS INVESTMENT BY PRIVATE INVESTORS

Surveys of overseas investment have been conducted since 1947–48 to obtain particulars of certain types of private capital flows to and from Australia. The surveys, when supplemented by other information, provide statistics of overseas investment in companies in Australia and in Australian public authority securities repayable in Australian currency, as well as statistics of Australian investment in companies overseas and in foreign government securities. Particulars of investment income from most of those classes of investment are also obtained from the surveys.

Certain types of private overseas investment are not included in the statistics which follow. Investment in real estate (except when made through companies) and loans between Australian individuals and non-resident individuals are not covered. Nor are changes in short-term liabilities between exporters and importers in Australia and overseas covered, except in so far as they arise from exports and imports between branches or subsidiaries and their home offices—in this case they are included in the figures of investment in branches or subsidiaries.

In the tables which classify investment in Australia according to country of origin, the investment is shown as an inflow from the country which is the immediate source of the capital. Income payable overseas is classified on a similar basis, i.e. it is classified to the country to which it is directly payable.

Remittances between Australia and overseas by Australian life insurance companies are regarded as capital transactions made to bring assets located in overseas countries into line with commitments in those countries, and are included as a flow of investment between Australia and overseas. Similar considerations apply to overseas life insurance companies with branches in Australia.

The following are explanatory notes relating to some of the terms used in the tables.

Companies. In these statistics the term 'companies' relates to both incorporated and unincorporated businesses.

Australian branches. Australian branches of companies incorporated overseas whose net liabilities to home office or whose net profit or loss exceeds $10,000, or which maintain in Australia a branch register of shares, debentures or unsecured notes.

Australian subsidiaries. For the purpose of these statistics an Australian subsidiary is a company in which there is ownership of 25 per cent or more of the company's ordinary shares (or voting stock) by one company or a group of associated companies in one overseas country, or ownership of 50 per cent or more of the company's ordinary shares (or voting stock) by individual persons or individual companies in one overseas country.

Direct investment. For the purpose of these statistics direct investment is overseas investment made through a branch or subsidiary (as defined above) by the overseas persons or overseas companies which hold the specified proportions of ordinary shares (or voting stock) in the subsidiary.

Overseas. For the purpose of these statistics, Papua and New Guinea and the other external territories under the control of Australia are regarded as overseas countries.

Portfolio investment and institutional loans. Investment other than direct investment, including loans raised overseas from financial institutions and other companies which have no direct investment in the borrowing company.

Undistributed profits. This term refers, in the case of Australian subsidiaries, to the equity of the overseas parent in the net earnings for taxation purposes of the Australian company, less tax (or tax provision) and less dividends declared. In the case of overseas subsidiaries of Australian companies, this term represents the equity of the Australian parent in the book value of the net earnings of the subsidiary after tax, less dividends paid or payable.

Unremitted profits. For these statistics this represents the net earnings of branches during the year, after tax, less remittances by the branches to their home offices during the year of net earnings and interest (irrespective of the period to which the earnings and interest relate). 'Net earnings' of Australian branches of overseas companies are, in general, based on the value of their income for taxation purposes.

The annual bulletin *Insurance and Other Private Finance* and the *Annual Bulletin of Overseas Investment* contain additional figures relating to overseas investment, including a longer range of years covered, and also a more detailed description of the figures.

Private overseas investment in companies in Australia and investment income payable overseas by companies in Australia

The inflow of private overseas investment in Australia since 1963–64 is shown in the next three tables.

ANNUAL INFLOW OF PRIVATE OVERSEAS INVESTMENT IN COMPANIES IN AUSTRALIA BY CATEGORY OF INVESTMENT AND TYPE OF COMPANY(*a*), 1963–64 TO 1967–68

($ million)

Year	*Annual inflow of direct private overseas investment in companies in Australia*					*Portfolio investment and institutional loans*(*b*)	*Grand total*
	Australian branches		*Australian subsidiaries*				
	Un-remitted profits	*Other direct investment*	*Undistributed profits*	*Other direct investment*	*Total*		
1963–64 .	22	36	110	249	418	28	446
1964–65 .	11	67	108	348	534	42	576
1965–66 .	15	85	106	268	473	207	680
1966–67 .	12	90	93	122	316	175	492
1967–68 .	36	99	193	177	504	386	890

(*a*) Increases in investment by some overseas investors are offset against withdrawals of investment by other overseas investors. (*b*) Partially estimated.

ANNUAL INFLOW OF PRIVATE OVERSEAS INVESTMENT IN COMPANIES IN AUSTRALIA, BY DOMICILE OF INVESTOR AND CATEGORY OF INVESTMENT(*a*), 1963-64 TO 1967-68

($ million)

Year	*United Kingdom*	*New Zealand*	*U.S.A. and Canada*	*Other countries*	*Total*
DIRECT INVESTMENT					
Undistributed income(*b*)—					
1963–64	80	3	45	5	132
1964–65	69	3	40	7	119
1965–66	60	3	52	5	121
1966–67	56	3	46	..	105
1967–68	112	4	107	5	229
Other direct investment—					
1963–64	102	−3	147	39	285
1964–65	173	..	193	49	414
1965–66	162	−2	141	52	353
1966–67	31	−3	158	25	212
1967–68	−3	−2	243	37	275
PORTFOLIO INVESTMENT AND INSTITUTIONAL LOANS(*c*)					
1963–64	11	9	8	..	28
1964–65	17	11	9	5	42
1965–66	38	−1	126	43	207
1966–67	27	−2	78	72	175
1967–68	270	−1	36	82	386
TOTAL					
1963–64	192	9	200	44	446
1964–65	259	14	242	61	576
1965–66	261	..	319	101	680
1966–67	114	−2	281	98	492
1967–68	379	1	386	125	890

(*a*) *See* footnote (*a*) to preceding table. (*b*) Unremitted profits of Australian branches plus undistributed profits of Australian subsidiaries. (*c*) Partially estimated.

Minus sign (−) denotes outflow.

ANNUAL INFLOW OF DIRECT PRIVATE OVERSEAS INVESTMENT IN COMPANIES IN AUSTRALIA, BY INDUSTRY IN WHICH CAPITAL INVESTED, 1963-64 TO 1967-68

($ million)

Year	*Primary production*	*Manu-facturing*	*Other industries*	*Total*
1963–64	36	218	163	418
1964–65	84	254	196	534
1965–66	127	182	164	473
1966–67	109	141	66	316
1967–68	167	211	126	504

The next three tables show investment income payable overseas by companies in Australia.

INVESTMENT INCOME PAYABLE OVERSEAS BY COMPANIES IN AUSTRALIA BY CATEGORY OF INCOME AND TYPE OF COMPANY, 1963-64 TO 1967-68

($ million)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Income payable on direct investment—					
Australian branches—					
Unremitted profits	22	11	15	12	36
Remitted profits and interest . . .	39	42	42	44	44
Australian subsidiaries—					
Undistributed profits	110	108	106	93	193
Distributed profits—					
Dividends payable	70	78	79	100	104
Interest remitted	7	11	13	17	18
Total, income payable on direct investment	*248*	*250*	*256*	*266*	*395*
Income payable on portfolio investment and institutional loans—					
Dividends	29	32	35	39	40
Interest	4	5	14	22	24
Total, income payable on portfolio investment, etc.	*33*	*37*	*49*	*60*	*65*
Grand total	**281**	**287**	**305**	**326**	**460**

INVESTMENT INCOME PAYABLE OVERSEAS BY COMPANIES IN AUSTRALIA BY COUNTRY TO WHICH PAYABLE AND CATEGORY OF INCOME 1963-64 TO 1967-68

($ million)

Year	*United Kingdom*	*New Zealand*	*U.S.A. and Canada*	*Other countries*	*Total*
DIRECT INVESTMENT INCOME					
Undistributed income(*a*)—					
1963–64 . . .	80	3	45	5	132
1964–65 . . .	69	3	40	7	119
1965–66 . . .	60	3	52	5	121
1966–67 . . .	56	3	46	..	105
1967–68 . . .	112	4	107	5	229
Distributed income on direct investment(*b*)—					
1963–64 . . .	57	1	52	6	116
1964–65 . . .	70	1	54	6	131
1965–66 . . .	78	..	50	6	135
1966–67 . . .	90	1	62	9	161
1967–68 . . .	82	1	76	8	166
INCOME PAYABLE ON PORTFOLIO INVESTMENT AND INSTITUTIONAL LOANS					
1963–64 . . .	20	7	3	3	33
1964–65 . . .	21	8	4	4	37
1965–66 . . .	23	9	13	5	49
1966–67 . . .	26	9	18	8	60
1967–68 . . .	27	9	19	10	65
TOTAL					
1963–64 . . .	157	11	100	13	281
1964–65 . . .	160	12	98	17	287
1965–66 . . .	161	12	116	16	305
1966–67 . . .	171	12	125	18	326
1967–68 . . .	222	14	202	23	460

(*a*) Unremitted profits of Australian branches plus undistributed profits of Australian subsidiaries. (*b*) Consists of remitted profits and interest of Australian branches, distributed profits and remitted interest of Australian subsidiaries.

Minus sign (—) denotes outflow.

INCOME PAYABLE OVERSEAS ON DIRECT INVESTMENT BY COMPANIES IN AUSTRALIA, BY INDUSTRY IN WHICH CAPITAL INVESTED, 1963-64 TO 1967-68

($ million)

Year	*Primary production*	*Manufacturing*	*Other industries*	*Total*
1963–64	18	156	74	248
1964–65	14	174	62	250
1965–66	25	157	74	256
1966–67	29	158	79	266
1967–68	52	225	118	395

Australian investment in companies overseas and investment income receivable from companies overseas

The outflow of Australian investment in companies since 1963–64 and a classification by country in which the capital was invested are shown in the following two tables.

ANNUAL OUTFLOW OF PRIVATE AUSTRALIAN INVESTMENT IN COMPANIES OVERSEAS BY CATEGORY OF INVESTMENT AND TYPE OF COMPANY(*a*), 1963–64 TO 1967–68

($ million)

Year	*Annual outflow of direct private Australian investment in companies overseas*					*Portfolio investment and institutional loans*	*Grand total*
	Overseas branches		*Overseas subsidiaries*				
	Unremitted profits	*Other direct investment*	*Undistributed profits*	*Other direct investment*	*Total*		
1963–64 . .	1	4	13	−5	13	−8	5
1964–65 . .	−1	4	20	10	32	−6	26
1965–66 . .	2	4	16	17	38	−5	33
1966–67 . .	−1	8	15	12	33	−7	26
1967–68 . .	2	2	18	16	38	−6	32

(*a*) Increases in investment by some Australian investors are offset against withdrawals of investment by other Australian investors.

Minus sign (−) denotes inflow.

ANNUAL OUTFLOW OF PRIVATE AUSTRALIAN INVESTMENT IN COMPANIES OVERSEAS, BY COUNTRY IN WHICH CAPITAL INVESTED(*a*), 1963–64 TO 1967–68

($ million)

Year	*United Kingdom*	*New Zealand*	*U.S.A. and Canada*	*Other countries*	*Total*
1963–64. . . .	−17	18	1	2	5
1964–65. . . .	−7	12	..	21	26
1965–66. . . .	2	14	1	17	33
1966–67. . . .	−5	8	..	23	26
1967–68. . . .	−3	8	..	26	32

(*a*) Increases in investment by some Australian investors are offset against withdrawals of investment by other Australian investors.

Minus sign (−) denotes inflow.

The next two tables show income from direct investment receivable by Australian companies from companies overseas, and the countries from which it is receivable.

INCOME FROM DIRECT INVESTMENT RECEIVABLE BY AUSTRALIAN COMPANIES FROM COMPANIES OVERSEAS, BY TYPE OF COMPANY AND CATEGORY OF INCOME, 1963–64 TO 1967–68

($ million)

Year	*Overseas branches*		*Overseas subsidiaries*		*Total*
	Unremitted profits (net)	*Remitted profits and interest*	*Undistributed profits (net)*	*Dividends and interest receivable*	
1963–64. . . .	1	5	13	13	32
1964–65. . . .	−1	5	20	18	41
1965–66. . . .	2	4	16	16	38
1966–67. . . .	−1	5	15	21	39
1967–68. . . .	2	6	18	19	44

INCOME FROM DIRECT INVESTMENT RECEIVABLE BY AUSTRALIAN COMPANIES FROM COMPANIES OVERSEAS, BY COUNTRY FROM WHICH RECEIVABLE, 1963-64 TO 1967-68

($ million)

Year	*United Kingdom*	*New Zealand*	*U.S.A. and Canada*	*Other countries*	*Total*
1963–64	..	16	1	15	32
1964–65	2	21	..	19	41
1965–66	1	16	1	18	38
1966–67	1	18	1	19	39
1967–68	3	17	1	23	44

Net annual flow of investment

The net annual flow of investment between Australia and overseas, and its classification by country, are shown in the following two tables. In addition to private overseas investment, the annual inflow of overseas investment in Australian public authority securities and net overseas remittances by life insurance companies have been incorporated in both tables.

NET ANNUAL FLOW OF INVESTMENT BETWEEN AUSTRALIA AND OVERSEAS COUNTRIES(*a*) 1963-64 TO 1967-68

($ million)

Year	*Annual inflow of investment*	*Annual outflow of investment*	*Net annual flow*
1963–64	465	10	455
1964–65	551	16	535
1965–66	654	27	627
1966–67	514	23	491
1967–68	1,038	27	1,011

(*a*) Increases in investment by some overseas investors are offset against withdrawals of investment by other investors.

NET ANNUAL FLOW OF INVESTMENT BETWEEN AUSTRALIA AND OVERSEAS COUNTRIES, BY COUNTRY, 1963-64 TO 1967-68

($ million)

Year	*United Kingdom*	*New Zealand*	*U.S.A. and Canada*	*Other countries*	*I.B.R.D. (a)*	*Net annual flow*
1963–64	235	−9	182	40	7	455
1964–65	214	..	276	46	−1	535
1965–66	224	−16	340	85	−7	627
1966–67	52	−14	385	90	−23	491
1967–68	347	−10	566	131	−23	1,011

(*a*) Particulars are not available of the domicile of securities issued to the International Bank for Reconstruction and Development.

Minus sign (−) denotes outflow.

BALANCE OF PAYMENTS

Estimates of a country's balance of payments are prepared for the purpose of providing a systematic record in money terms of the economic transactions which take place over a period between that country and all other countries. Such records are essential to the examination of influences which external factors have on the domestic economy. The Australian economy is subject to fairly large fluctuations in export income, and it is also affected in important respects by variations in the level of foreign investment and the demand for imports. Consequently, these estimates have always assumed particular importance in this country.

Official estimates of Australia's balance of payments covering the period 1928–29 to 1930–31 were included in the Appendix to Year Book No. 24, 1931. Except for the war years (1939 to 1945), estimates have since been published annually. Detailed estimates are currently provided twice yearly in the form of a mimeographed publication *Balance of Payments*. This publication brings the estimates forward to the end of the most recent financial year or half-year and, together with a printed volume *The Australian Balance of Payments*, 1928–29 *to* 1950–51, provides also a description of the various items included and the sources from which the information is obtained. A summarised statement of the principal current account items and capital movements is prepared and issued on a quarterly basis in the *Balance of Payments—Quarterly Summary*.

The form of presentation of the Australian estimates has recently been revised in order to bring it more closely into line with the recommendations of the Balance of Payments Manual of the International Monetary Fund (I.M.F.). The basic distinction remains, however, between 'current account' and 'capital account' transactions. Current account transactions may be defined as those involving changes in the ownership of goods or the rendering of services between residents of Australia and the rest of the world and include such items as exports, imports, shipping freights, dividends, profits and interest, travel, and government expenditure. The current account also includes the value of transfers in the form of gifts in cash or kind made or received by residents of Australia, both private and government, to or from the rest of the world. Capital account transactions may be defined as those involving claims to money and titles of investment between residents of one country and those of another country and include government loan-raising operations overseas, investment by overseas residents in Australian companies, the investment of Australian residents in companies overseas, and transactions involving changes in the overseas assets and liabilities of certain Australian marketing authorities.

By definition, the balance of payments on current account and the balance of payments on capital account during a given period must exactly offset one another. Errors and omissions, however, occur in the estimation of the amounts involved in various items in both the current and capital accounts, and, in addition, there are differences in timing between the statistical recording of trade and invisible transactions and the relevant foreign exchange transactions. It is therefore necessary to introduce into the estimates a 'balancing item' which allows the identity between the current and capital account balances to be preserved. The 'balancing item' is included in the capital account, but, as mentioned above, it includes discrepancies in the current account and does not, as is frequently supposed, include only errors, omissions and timing differences related to capital transactions.

Details of the estimates are assembled from a variety of sources of which the following are the more important: (i) statistics of exports and imports obtained from Australian trade statistics; (ii) details of the import valuation adjustment obtained from a sample of the invoices submitted to the Department of Customs and Excise in respect of imports into Australia; (iii) information on particular invisible current account items and capital movements obtained by regular inquiry from private organisations and government departments; (iv) details of receipts and payments of foreign exchange provided by the banking system; (v) information on dividends remitted, undistributed income and private investment in companies provided by statistics of overseas investment collected by this Bureau; (vi) information on freight on imports and other items concerned with overseas shipping obtained from a sample of the invoices submitted to the Department of Customs and Excise in respect of imports into Australia and a survey of shipping operations conducted by this Bureau; and (vii) information on international reserves supplied by the Reserve Bank of Australia.

Current account

The balance of payments on current account is arranged to show a series of credit items and a corresponding series of debit items. Primarily, entries on the credit side include all current transactions which result in receipts of foreign exchange (for goods and services, property income or transfers), and on the debit side the similar transactions which result in payments of foreign exchange. The principal exceptions to this rule are the amounts shown for undistributed income and where debts incurred for current account items, principally goods, are subsequently capitalised. In respect of these amounts no movement of foreign exchange takes place, the amounts concerned being treated as credits or debits in the relevant sections of the current account, and as corresponding outflows or inflows in the relevant sections of the capital account. A further exception occurs in the case of transfers in kind where no foreign exchange movement takes place. The values of transfers received or provided in kind are shown as credits or debits respectively.

The largest items shown in the current account are exports and imports, and the difference between them represents the balance of trade. This is usually the most variable relationship in the balance of payments and is, therefore, a most important one. *For balance of payments purposes, certain adjustments are made to the recorded trade statistics.* Briefly, these adjustments are made to exclude those transactions for which there is no change of ownership between residents and non-residents of Australia and to include certain transactions for which there has been a change of ownership but for which customs entries are not required. In addition, a valuation adjustment is made to the recorded import statistics in order to remove the overstatement which results from the basis of valuation for customs duty. A full description of the adjustments is provided in Appendix V. of the publication *Balance of Payments*, 1960–61 *to* 1964–65. A full evaluation of the overall position on current account, however, occurs only after the invisible items have been taken into account. In value terms the most important of these are the transportation items. Entries appear on both the debit and credit sides, the principal component on the debit side being freight payable overseas on imports into Australia. The principal component on the credit side is expenditure by overseas carriers, which represents mainly overseas ships' expenditure for stevedoring, port charges, etc. incurred in loading and discharging goods at Australian ports, and stores purchased in Australia. The items next in importance are those concerning income from property. Debit entries under this heading include dividends, profits, interest and royalties payable overseas, while the credit entries include similar details of amounts receivable by Australian residents. These items include undistributed income for which, as mentioned above, no monetary payments occur. The remaining items are smaller than those mentioned above, and include travel, government transactions, transfers (including foreign aid made available by the Australian Government), and, on the credit side, the net value of Australian gold production.

Capital account

The capital account is also arranged to show a series of net credits and debits. Entries on the credit side represent a net increase in non-residents' assets in Australia or a net decrease in Australian assets overseas, while debit entries represent a net decrease in non-residents' assets in Australia or a net increase in Australian assets overseas.

Capital account transactions are also grouped according to the sector of the Australian party to the transactions. The government sector, therefore, includes all capital transactions of central, State, and local governments with the exception of transactions of monetary institutions (which are included in the monetary sector), while the private sector covers transactions of all resident individuals and private institutions (again, excepting monetary institutions). The monetary sector covers all banking institutions, including government-owned banks. Transactions of the monetary sector are further sub-divided into official and non-official transactions. Official transactions of Australian monetary institutions are those which cause changes in international reserves and in Australia's net I.M.F. position and transactions between the Reserve Bank of Australia and foreign central monetary institutions. Non-official transactions include all other transactions of Australian monetary institutions.

In the government sector the most important items include transactions by non-residents in government securities domiciled overseas and in Australia and transactions involving changes in Australia's assets with and liabilities to international non-monetary institutions such as the International Bank for Reconstruction and Development and the Asian Development Bank. Other government transactions are largely a reflection of the net effect on the balance of payments of leads and lags between payments made overseas for items of equipment for the defence services or government airlines and the delivery of the equipment. In periods where payments exceed the value of deliveries a net debit results; in periods where the value of deliveries exceeds payments a net credit is recorded.

In the private sector the most important items are overseas investment in Australian companies, Australian investment in companies overseas, and the transactions of marketing authorities. The figures for marketing authorities represent changes in the estimated value of commodity stocks held overseas by, or in amounts owed by overseas debtors to, the principal Australian marketing authorities.

In the monetary sector the most important item is that which shows the net change in Australia's international reserves. Also important are transactions involving changes in Australia's position with the I.M.F.

The balancing item includes errors and omissions and timing differences, referred to on page 359.

Tables—Balance of payments

The following tables show, for the three years 1965–66 to 1967–68, particulars of:

(i) the balance of payments; and

(ii) the balance of payments on current account, by major groups of countries.

BALANCE OF PAYMENTS: AUSTRALIA, 1965-66 TO 1967-68

($ million)

	1965–66		*1966–67*		*1967–68*	
	Credit	*Debit*	*Credit*	*Debit*	*Credit*	*Debit*
CURRENT ACCOUNT						
Goods—						
1 Exports f.o.b.(*a*)	2,626	..	2,926	..	2,941	..
2 Imports f.o.b.(*a*)	..	2,822	..	2,837	..	3,159
Balance of trade	..	*196*	*89*	..	..	*218*
Invisibles—						
3 Gold production	25	..	24	..	22	..
4 Transportation—						
4.1 Freight payable overseas(*b*)	..	310	..	305	..	367
4.2 Expenditure of overseas carriers	195	..	213	..	243	..
4.3 Other transportation	100	210	99	243	117	267
5 Travel	58	122	70	133	88	140
6 Government—						
6.1 Australian government—						
6.11 Defence expenditure	..	34	..	48	..	57
6.12 Other expenditure	..	28	..	32	..	38
6.13 Services to non-residents	32	..	36	..	34	..
6.2 Foreign governments' expenditure	45	..	47	..	41	..
7 Miscellaneous—						
7.1 Business expenses	29	51	26	54	36	51
7.2 Other	27	46	29	44	33	46
8 Property income—						
8.1 Direct investment—						
8.11 Undistributed	18	121	13	105	17	224
8.12 Distributed	20	141	26	161	26	168
8.2 Interest on government loans	..	73	..	72	..	76
8.3 Royalties and copyrights	4	49	4	56	5	64
8.4 Other	71	50	79	60	79	65
9 Government transfers—						
9.1 Papua-New Guinea	..	89	..	105	..	106
9.2 Other foreign aid	..	38	..	46	..	51
10 Private transfers—						
10.1 Migrants' funds	86	21	100	24	116	28
10.2 Other	36	53	34	55	38	56
Balance on current account	..	**886**	..	**654**	..	**1,127**

For footnotes *see* next page.

BALANCE OF PAYMENTS: AUSTRALIA 1965–66 TO 1967–68—*continued*

($ million)

	1965–66		*1966–67*		*1967–68*	
	Credit	*Debit*	*Credit*	*Debit*	*Credit*	*Debit*
CAPITAL ACCOUNT (NET)						
Government (non-monetary)—						
11 Government securities—						
11.1 Domiciled overseas—						
11.11 I.B.R.D.	..	7	..	23	..	23
11.12 Other central government	..	17	50	..	156	..
11.13 Local and semi-government	..	3	..	3	..	1
11.14 Discounts, etc.	2	..	..	..	2	..
11.2 Domiciled in Australia	..	1	..	2	15	..
12 International non-monetary institutions—						
12.1 Changes in assets	..	6	..	14	..	14
12.2 Changes in liabilities	..	..	4	..	3	..
13 Other government transactions	46	..	..	42	..	49
Private (non-monetary)—						
14 Overseas investment in Australian companies—						
14.1 Direct investment—						
14.11 Undistributed income	121	..	105	..	224	..
14.12 Other	354	..	213	..	250	..
14.2 Portfolio investment and institutional loans	207	..	175	..	383	..
15 Australian investment overseas—						
15.1 Direct investment—						
15.11 Undistributed income	..	18	..	13	..	17
15.12 Other	..	25	..	20	..	21
15.2 Portfolio investment	5	..	7	..	7	..
16 Other private investment	5	..	2	..	5	..
17 Marketing authorities	34	..	..	74	33	..
Monetary—						
18 Non-official transactions—						
18.1 Changes in assets	..	..	..	..	..	1
18.2 Changes in liabilities	10	..	13	..	47	..
19 Official transactions—						
19.1 I.M.F. account—						
19.11 Changes in assets	..	89	..	..	..	..
19.12 Changes in liabilities	49	..	..	26	..	71
19.2 International reserves	..	21	177	..	..	(c)7
19.3 Other	..	..	..	31	..	..
Balancing item	240	..	156	..	206	..
Balance on capital account	**886**	..	**654**	..	**1,127**	..

(*a*) The amounts shown represent the recorded trade figures adjusted for balance of payments purposes. Adjustments affect both coverage and valuation. (*b*) Total freight and insurance on imports, whether payable overseas or in Australia, is estimated at $340 million in 1965–66, $341 million in 1966–67 and $402 million in 1967–68. (*c*) Excludes a reduction of $113 million in the Australian dollar equivalent during November 1967 due to the devaluation of the pound sterling and a number of other currencies held as part of Australia's international reserves.

BALANCE OF PAYMENTS ON CURRENT ACCOUNT BY MAJOR GROUPS OF COUNTRIES: AUSTRALIA
1965-66 TO 1967-68
($ million)

	1965–66	*1966–67*	*1967–68*
EXPORTS f.o.b.(*a*)—			
Sterling—			
United Kingdom	466	400	422
Other	498	660	591
Non-sterling—			
North America	374	415	461
European Economic Community	447	429	377
European Free Trade Association(*b*)	29	38	32
Japan	466	582	638
Eastern Europe, China (mainland), etc.	189	189	192
Other	157	213	228
Total exports	*2,626*	*2,926*	*2,941*
IMPORTS f.o.b.(*a*)—			
Sterling—			
United Kingdom	697	673	664
Other	310	343	369
Non-sterling—			
North America	821	815	1,029
European Economic Community	352	350	394
European Free Trade Association(*b*)	134	132	134
Japan	274	294	330
Eastern Europe, China (mainland), etc.	40	41	40
Other	194	189	199
Total imports	*2,822*	*2,837*	*3,159*
INVISIBLES (NET)—			
Sterling—			
United Kingdom	−173	−165	−192
Other	−160	−187	−218
Non-sterling—			
North America	−236	−240	−309
European Economic Community	−76	−82	−93
European Free Trade Association(*b*)	8	7	7
Japan	5	−5	2
Eastern Europe, China (mainland), etc.	−3	−5	−5
Other	−62	−69	−103
International agencies	−18	−21	−20
Gold production	25	24	22
Total invisibles (net)	*−690*	*−743*	*−909*
BALANCE ON CURRENT ACCOUNT—			
Sterling—			
United Kingdom	−404	−438	−434
Other	28	130	4
Non-sterling—			
North America	−683	−640	−877
European Economic Community	19	−3	−110
European Free Trade Association(*b*)	−97	−87	−95
Japan	197	283	310
Eastern Europe, China (mainland), etc.	146	143	147
Other	−99	−45	−74
International agencies	−18	−21	−20
Gold production	25	24	22
Total balance on current account	**−886**	**−654**	**−1,127**

(*a*) The amounts shown represent the recorded trade figures adjusted for balance of payments purposes. Adjustments affect both coverage and valuation. (*b*) Other than the United Kingdom.

Minus sign (−) denotes deficit.

International reserves

The following table shows the total net gold and foreign exchange holdings of official and banking institutions as at 30 June 1966, 1967 and 1968.

AUSTRALIAN INTERNATIONAL RESERVES, 1965-66 TO 1967-68

(*Source:* Reserve Bank of Australia)

($ million)

	30 June		
	1966	*1967*	*1968*
Gold	198	204	230
United States dollars	194	251	222
Sterling	981	742	629
Other foreign exchange	2	1	12
Total	**1,375**	**1,198**	**1,092**

Indexes of values of exports and imports at constant prices

The following tables show annual indexes of the values of Australian exports and imports of merchandise at average 1966–67 prices. A description of these measures is given in the first issue of the bulletin *Exports and Imports of Merchandise at Constant Prices* (publication reference No. 8.21) published on 10 October 1968.

EXPORTS OF MERCHANDISE, 1959-60 TO 1967-68

Indexes of Values at Average 1966-67 Prices

(*Base: Year* 1966–67 = 100)

	Food and live animals								
	Meat	*Cereals*	*Other (dairy produce, fruit, sugar, etc.)*	*Total food and live animals*	*Wool and sheep-skins*	*Metal-liferous ores and metal scrap*	*Metal manu-factures, machin-ery, transport equipment*	*Other exports*	*All exports of merchan-dise (a)*
Percentage of total value of exports in 1966–67(*b*)	9.5	15.8	12.5	37.8	29.7	5.6	14.2	12.7	100.0
1959–60	Not available								66
1960–61									69
1961–62									79
1962–63									77
1963–64									90
1964–65									89
1965–66									90
1966–67	100	100	100	100	100	100	100	100	100
1967–68	100	94	99	97	102	147	100	121	105

IMPORTS OF MERCHANDISE, 1959-60 TO 1967-68

Indexes of Values at Average 1966-67 Prices

(*Base: Year* 1966–67 = 100)

	Food, beverages, and tobacco	*Fuels*	*Basic materials*	*Chemicals (including plastics)*	*Textiles, fabrics, etc.*	*Metal manu-factures, machinery, transport equipment*	*Other imports*	*All imports of merchan-dise(a)*
Percentage of total value of imports in 1966–67(*b*)	5.2	8.2	7.4	9.9	8.0	43.3	18.0	100.0
1959–60	Not available							64
1960–61								75
1961–62								61
1962–63								73
1963–64								81
1964–65								98
1965–66								98
1966–67	100	100	100	100	100	100	100	100
1967–68	99	100	107	109	107	111	111	109

(*a*) The series shown for years prior to 1966–67 are not strictly comparable to the series shown from 1966–67 onwards (*see* the bulletin referred to in the headnote to these two tables). (*b*) These percentages may be used in analysing the contribution of each group to movements in the total index.

CHAPTER 12

TRANSPORT, COMMUNICATION AND TRAVEL

The statistics in this chapter relate in the main to the year 1967–68, with comparisons restricted to a few recent years. More detailed figures and particulars for earlier years are included in the annual bulletins, *Transport and Communication*, *Commonwealth Finance*, and *State, Territory and Local Government Authorities' Finance and Government Securities*, and in the annual mimeographed statement *Motor Vehicle Registrations*. Current information on subjects dealt with in this chapter appears in the *Quarterly Summary of Australian Statistics*, the *Monthly Review of Business Statistics*, the *Digest of Current Economic Statistics*, *Overseas Shipping Cargo* (quarterly), *Motor Vehicle Registrations* (monthly) and two preliminary monthly statements *Registrations of New Motor Vehicles*, *Road Traffic Accidents involving Casualties* (quarterly), and *Overseas Arrivals and Departures* (monthly and quarterly)—*see* page 427. Greater detail on the latter subject is contained in the annual bulletin *Demography*.

Information additional to that contained in Bureau publications is available in the annual reports and other statements of the Department of Shipping and Transport, the various harbour boards and trusts, the several Government railways authorities, the Department of Civil Aviation, the Postmaster-General's Department, the Overseas Telecommunications Commission, the Australian Broadcasting Control Board, and the Australian Broadcasting Commission.

THE AUSTRALIAN TRANSPORT ADVISORY COUNCIL AND ITS STANDING COMMITTEES

The Australian Transport Advisory Council, established April 1946, comprises the Commonwealth Minister for Shipping and Transport as Chairman, the Commonwealth Ministers for the Interior and Territories, and each State Minister for Transport. The administration of the Council and the standing committees it has established is the responsibility of the Commonwealth Department of Shipping and Transport. The general practice is that the Council convenes at least once a year, the annual meetings moving successively from one capital city to another. The Council primarily considers policy matters relating to transport operation, co-ordination and development.

The regulation of, and the executive responsibility for, transport is shared concurrently between the Commonwealth and State Governments. The Australian Transport Advisory Council is the meeting ground of Commonwealth and States at a ministerial level and provides an effective means for inviting discussion and reaching by way of mutual consent and understanding a uniformity of approach towards transport administrative procedures and policy. It also provides a means for reviewing and discussing proposals for the national solution of pressing transport problems and the rectification of transport deficiencies generally.

Some of the Council's most useful work has been accomplished through the agency of committees established by the Council from time to time. Some committees are of a semi-permanent nature. They were established to initiate discussion and action on transport problems referred by member Ministers and other authorities and to undertake specialised work. Most of these committees meet at regular intervals and report annually on their progress to the Australian Transport Advisory Council. These committees are: The Australian Motor Vehicle Standards Committee, The Australian Road Safety Council, The Australian Road Traffic Code Committee, The Committee of Transport Economic Research, The Australian Dangerous Goods Transport Committee, and The Australian Motor Vehicle Design Advisory Panel.

Further details of the work of the Australian Transport Advisory Council and its standing committees are given in Year Book No. 53, 1967, pages 421–4.

SHIPPING

Control of shipping

Commonwealth navigation and shipping legislation

Section 51 (i) of the Commonwealth Constitution empowers the Parliament of the Commonwealth to make laws in respect of 'Trade and commerce with other countries, and among the States'. By Section 98 this power is further defined as extending to navigation and shipping.

Legislation before 1914–18 War. The first essay in the way of legislation in this direction was made in March 1904, when a Bill for a Navigation and Shipping Act was introduced in the Senate by the Attorney-General of the first Deakin Administration. This Bill was withdrawn at an early stage for further consideration and redrafting. The Deakin Ministry resigned in April 1904, and the succeeding Watson Government, in view of the far-reaching and important nature of the Bill, decided to refer it to a Royal Commission for consideration and report. In 1905 the Commission presented a draft Bill, the main principles of which, in so far as they affected overseas shipping, were then, at the invitation of the Imperial Government, considered at an Imperial Shipping Conference held in London in 1907, at which representatives of Great Britain, Australia, and New Zealand were present. The Conference considered, *inter alia*, the following recommendation of the Royal Commission: 'That the coastal trade of the Commonwealth be reserved for ships on the Australian Register, or ships conforming to Australian conditions, and licensed to trade on the Australian coast'; and recommended: 'That the vessels to which the conditions imposed by the law of Australia or New Zealand are applicable should be (i) vessels registered in the colony, while trading therein, and (ii) vessels wherever registered, while trading on the coast of the colony'. The Royal Commission made further modifications of the draft to conform with the resolutions of the Conference, and the resultant Bill was re-introduced in the Senate in September 1907 by the second Deakin Administration. Owing to pressure of other business, however, it lapsed. The Bill was again introduced in the Senate in September 1908, but again it lapsed; proceedings were resumed in 1909, but again the Bill lapsed. It was brought in again in 1910 by the second Fisher Administration, revived in 1911, lapsed again, and finally became, under the last-mentioned Government, the *Navigation Act* 1912. While preparations were being made to bring it into operation, the war broke out, and action was postponed.

Navigation Act 1919 *and amending Acts*

At the conclusion of the 1914–18 War the proclamation of the 1912 Act could no longer be delayed, and in 1919 the Government introduced another Bill to give power to proclaim different portions of the Act to commence at different times. In order to make the change as gradual as possible, groups of sections were brought into operation from time to time, the first group, which commenced on 1 July 1921, comprising the coasting trade provisions. Other parts of the Act deal with the subjects of masters and seamen, foreign seamen, surveys of ships, unseaworthy ships, passengers, wrecks and salvage, limitation of liability in respect of Government ships, Courts of Marine Inquiry, legal proceedings, and other miscellaneous matters.

Soon after the coasting trade provisions commenced, the owners of a number of intra-State ships took steps to have tested the validity of the application to their ships of the manning and accommodation provisions of the Act. The judgment of the High Court was to the effect that those provisions did not apply to vessels engaged solely in the domestic trade of a State. In consequence of this judgment the Government decided not to enforce the provisions of the Act then in force on any intra-State ship, and similarly other sections since brought into force have not in general been applied to such ships.

Although a considerable amount of shipping has thereby been left to the control of the various State Governments, for all ships trading beyond one State there is uniform procedure in regard to such matters as: (i) the engagement and discharge of seamen; (ii) the standard of accommodation provided for crews; (iii) scales of medicines; (iv) the survey of hulls, machinery and gear; (v) the carriage and stowage of cargo; (vi) loadlines; (vii) the adjustment of compasses; and (viii) the examination of masters, mates, and engineers for certificates of competency.

The Act provides for the granting of licences to ships to engage in the coasting trade if they meet the requirements of Section 288 in relation to Australian manning scales and the payment of wages in accordance with Australian award conditions. Non-Australian vessels are not excluded from engaging in the coasting trade under licence, but because of the high standard of pay and accommodation on Australian licensed vessels, virtually no non-Australian shipowner seeks a licence. Section 286(1.) of the Act provides that if no licensed ship is available for a service between ports, or if the service carried out is inadequate, the Minister may, if satisfied it is in the public interest to do so, grant permits to unlicensed ships to engage in the trade. In addition, foreign ships have occasionally been permitted to trade under exemptions granted under section 422A of the Act.

The 1919 Act also extended the coasting trade provisions of the Act to the Territories under the authority of the Commonwealth, and to those governed under a Mandate. In 1925, however, it was found necessary in the interest of the development of the Territories to issue an Order in Council directing that trade with and in the Territories of Papua and New Guinea should not be deemed to be engaging in the coasting trade. Another amending Act, passed in 1920, enabled the Commonwealth to give effect to provisions of the International Convention for the Safety of Life at Sea, and to grant permits to British ships to trade on the coast in special circumstances. A 1934 amendment brought the Act into line with a new International Convention for the Safety of Life at Sea (1929) and with an International Load Line Convention (1930). Further amendments were made in 1942 and by the *Statute Law Revision Act* 1950.

During the 1939–45 War a Maritime Industry Commission was established under National Security Regulations to deal with a limited number of industrial questions, and many of its Orders extended or modified provisions of the Navigation Act in regard to officers and seamen. Following serious postwar hold-ups in the shipping industry, the Act was amended in 1952, establishing machinery thereunder which replaced the Commission and dealt with industrial questions in the industry and with the allied problems of seamen and crew accommodation. Two Committees were set up under the Act to deal with the matters of the disciplining of seamen and with crew accommodation. Each Committee was made up of four members representative of shipowners, one of deck officers, one of engine-room officers and two of seamen other than officers, with an officer of the Department of Shipping and Transport as Chairman. Any question regarding administration or the making of regulations, etc. may be referred to the Marine Council, which is the disciplining Committee, but it is obligatory on the Minister to seek the Council's advice upon all proposed regulations with respect to the scales of officers, crew and provisions.

In 1956 the provisions relating to arbitration machinery, which had been inserted into the framework of the Act by the 1952 amendments, were repealed when the Arbitration Court was reconstituted as the Conciliation and Arbitration Commission.

The 1953 amending Navigation Act, which was brought into operation in 1959, amended the Principal Act to enable the Commonwealth to accept a further Safety of Life at Sea Convention (that of 1948), and in 1958, 1961, and 1965 further substantial amendments were made as the result of a series of general reviews of the provisions of the Act; these amendments corrected anomalies which had arisen or had been discovered, and brought the legislation into line with the developing shipping practices of other maritime nations. In 1966 the Statute Law Revision (Decimal Currency) Act provided for the conversion of all monetary references in the Act to decimal currency, and in 1967 a new amending Act was passed to enable Australia to accept still another Safety of Life at Sea Convention which had been drawn up in 1960. (This Act came into force on 20 March 1968.) In 1968 a further amending Act was passed to enable Australia to accept the International Convention on Load Lines 1966 which had replaced the 1930 Convention on that subject. (This Act came into force on 29 October 1968.)

Other Commonwealth Acts connected with shipping. Other Commonwealth Acts connected with shipping are the *Sea Carriage of Goods Act* 1924, the *Seamen's Compensation Act* 1911–1968, the *Seamen's War Pensions and Allowances Act* 1940–1968, the *Pollution of the Sea by Oil Act* 1960–1965, the *Australian Coastal Shipping Commission Act* 1956–1966, the *Australian Coastal Shipping Agreement Act* 1956, the *Stevedoring Industry Act* 1956–1966, the *Beaches, Fishing Grounds and Sea Routes Protection Act* 1932–1966, the *Submarine Cables and Pipelines Protection Act* 1963–1966, and the *Lighthouses Act* 1911–1966, the last-mentioned being made under Section 51 (vii) of the Constitution, which provides power in respect of 'lighthouses, lightships, beacons and buoys'.

Australian Coastal Shipping Commission

This Commission was established in 1956 for the purpose of maintaining and operating interstate, overseas and territorial shipping services, and replaced the Australian Shipping Board. It operates the Australian National Line, a Commonwealth-owned merchant shipping service which at 30 June 1968 comprised thirty-six vessels totalling 299,820 deadweight tons.

These vessels include two vehicle deck passenger ships, *Empress of Australia*, 12,037 gross tons and *Princess of Tasmania*, 3,981 gross tons; one vehicle deck cargo ship of 1,644 deadweight tons; four ore carriers totalling 97,950 deadweight tons; fourteen bulk carriers totalling 138,498 deadweight tons; fourteen general cargo ships totalling 55,890 deadweight tons; and one grain carrier of 2,014 deadweight tons.

At 30 June 1968 vessels on order at Australian shipyards for the Commission were three vehicle deck cargo vessels, each of 4,000 deadweight tons, a 55,000 deadweight ton ore carrier, an additional vehicle deck passenger vessel to operate between Melbourne and Tasmania and a 12,100 deadweight tons ore/container ship for the Darwin trade. In addition an 11,000 deadweight tons vehicle deck container ship for service to Japan is on order from a Japanese shipyard.

Six terminals have been established in Melbourne, Sydney and Tasmania to service the Line's vehicle deck vessels. At 30 June 1969 construction was underway at five terminals in Queensland—at Brisbane, Mackay, Rockhampton, Townsville and Cairns. The new terminals will come into operation with the commissioning of the new vehicle deck ships.

During 1967–68 the passenger vessels *Empress of Australia* and *Princess of Tasmania* and the vehicle deck cargo vessel *Bass Trader*, supplemented at times by conventional tonnage, carried a total of 115,407 passengers and 1,269,221 tons of cargo between the mainland and Tasmania. Over the same period a total of 8,123,634 tons of cargo was carried by Australian National Line vessels.

Australian Shipbuilding Board

Established in March 1941 as a wartime measure under the National Security (Shipbuilding) Regulations and constituted in 1948 under the *Supply and Development Act* 1939–1948, the Board now operates under the control of the Minister for Shipping and Transport. In November 1963 the Commonwealth Public Service Board approved its permanent establishment as a division of the Department of Shipping and Transport. The membership of the Board consists of a Chairman, a Finance Member, and three other members, one of whom is also a member of the Naval Board. The Division's staff numbers 105 including naval architects, engineers, accountants and clerical staff.

The functions of the Board are set out in detail in Regulation 22(4) of the Supply and Development Regulations and in the exercise of those functions the Board is responsible for:

(*a*) recommending to the Minister for Shipping and Transport the price at which vessels may be purchased and disposed of by him on behalf of the Commonwealth;
(*b*) the design and inspection of construction of merchant ships;
(*c*) research into all matters connected with or incidental to shipbuilding;
(*d*) advice to the Minister on developments in the shipbuilding industry;
(*e*) rendering assistance to all sections of the industry.

To 31 December 1968, the Board had arranged for the construction of 157 vessels valued at approximately $415 mil.

As well as specialised merchant vessels the Board has also arranged for the construction of one semi-submersible oil drilling rig, dredgers of various types, specialised offshore oil drilling service vessels, a large floating crane in addition to bulk carriers, oil tankers and container ships.

Orders held by the Board at 31 December 1968, were valued at $94 mil. and numbered twenty-eight vessels. These included two large bulk carriers of about 55,000 deadweight tons, one 600 ton capacity derrick barge, three roll-on roll-off cargo vessels, two fast container ships, one passenger-vehicular ferry, one combination bulk and container ship and a number of tugs and offshore drilling rig service vessels. A 150 ft hydrographic survey vessel is being built as a SEATO aid item from the Commonwealth Government to the Government of the Philippines.

There are five major Australian shipyards building merchant vessels—two in Queensland, two in South Australia, and one in New South Wales; and two shipyards engaged principally in naval shipbuilding—one in New South Wales and one in Victoria. There are also numerous smaller yards, situated in every State, building smaller steel and wooden working and pleasure craft.

Shipbuilding subsidy. The Australian shipbuilding industry has been subsidised since 1947, and following the 1963 Tariff Board inquiry into measures of assistance to the Australian shipbuilding industry, the Government decided to extend the shipbuilding subsidy at its existing rate of up to one-third of the cost of construction to include all types of vessels of 200 tons gross and over built in recognised shipyards and intended for use in Australian coastal or inland waterways. This came into effect on 20 May 1964. In respect of vessels of less than 200 tons gross, Australian shipbuilders are afforded protection under the Customs Tariff. The Tariff Board will again inquire into the Australian shipbuilding industry in 1969.

Australian Stevedoring Industry Authority

In March 1947 legislation established a permanent Stevedoring Industry Commission to continue in peace-time the functions performed during the war by the Commission established under National Security legislation. In June 1949 legislation was enacted to abolish the Stevedoring Industry Commission, on which employers and employees were represented, and establish in its place a Stevedoring

Industry Board of three members, to attend to administrative matters formerly under the control of the Commission, such as the operation of labour bureaux at ports, payment of attendance money and provision of amenities. The industrial functions which previously came within the province of the Commission were assigned to a single Judge of the Commonwealth Court of Conciliation and Arbitration. In August 1956, following a Committee of Inquiry into the stevedoring industry, the Stevedoring Industry Board was replaced by the Australian Stevedoring Industry Authority of three members, including a representative of the management side of industry and a representative of the trade union movement. At the same time the judicial and non-judicial functions formerly exercised by the Commonwealth Court of Conciliation and Arbitration were divided between the Commonwealth Industrial Court and the Commonwealth Conciliation and Arbitration Commission respectively. Awards of the Conciliation and Arbitration Commission subsequently placed payment of sick pay, public holiday pay and annual leave under the administration of the Authority. Under amending legislation, which operated from 6 June 1961, the Authority became responsible for payment of long service leave to registered waterside workers, and its disciplinary powers were strengthened to reduce the time lost through unauthorised stoppages. Further amending legislation which operated from 8 October 1965 made the Authority responsible for the recruitment of waterside workers.

In October 1965 the Government invited the Australian Council of Trade Unions, the Waterside Workers' Federation of Australia, the Association of Employers of Waterside Labour, the Australian Stevedoring Industry Authority, and the Department of Labour and National Service to confer under the chairmanship of Mr A. E. Woodward, Q.C., with the overall objective of improving the long-term conditions in the stevedoring industry. Following a series of meetings, the Conference, known as the National Stevedoring Industry Conference, published a General Report in April 1967 recording agreement between the parties on a number of matters. These included *inter alia* weekly hire for all registered waterside workers in major ports, together with a pension scheme and provision for reducing the statutory retirement age progressively from seventy to sixty-five years of age. Special arrangements have been agreed to cover any prospective redundancy problems. Following adoption of the Report by all the parties, including the Government, enabling legislation was introduced to allow the changes to be implemented. Permanent employment was commenced in Sydney on 27 November 1967, and in Melbourne, Port Kembla, Adelaide, Fremantle and Brisbane on the respective dates, 8 January, 19 February, 4 March, 18 March and 12 August 1968. Other appropriate ports will follow progressively.

The statutory provisions relating to the industry are now contained in the *Stevedoring Industry (Temporary Provisions) Act* 1967 (and Regulations made thereunder), the *Stevedoring Industry Act* 1956–1966, and Division 4 of Part III of the *Conciliation and Arbitration Act* 1904–1967.

Trade Practices Act 1965–1967 (Part XA)

The Trade Practices Act Part XA (Overseas Cargo Shipping) came into force on 1 September 1967. The Part is administered by the Minister for Trade and Industry.

The Act provides for the filing, with the Clerk of Shipping Agreements, of certain agreements of a specified character between shipowners operating in the outward trades from Australia. A shipowner who is a party to such an agreement may be called upon to negotiate with a 'shipper body' with regard to arrangements for, and the terms and conditions that are to be applicable to, the cargo shipping to which the agreement relates. A 'shipper body' is an association, designated by the Minister, that represents the interests of producers and shippers of Australian export goods. Whether a shipowner has failed so to negotiate, or whether the services provided pursuant to the agreement are adequate, efficient or economical, are matters that may be referred by the Minister for inquiry and report by the Trade Practices Tribunal. Certain powers are vested in the Governor-General to disapprove an agreement after consideration of a report to the Minister by the Tribunal. A probable effect of such a disapproval would be to force the shipowners to carry on business as individuals, and not as members of a 'conference'. ('Conferences' are the associations into which shipowners traditionally combine in the cargo liner trades). The Governor-General may, however, in his discretion approve such a shipowner entering into another similar agreement.

In addition to the provisions relating to conferences the Act also makes similar provisions for trades where only one line is operating. Such a line may, as a result of a declaration by the Governor-General, be prohibited from engaging in certain specified activities in carrying on that business, e.g. engaging in freight-cutting with the object of substantially damaging the business of another shipowner.

The Act also contains provisions which secure rights for Australian flag vessels to operate in the trades from Australia.

Collection and presentation of statistics

Basic documents

From July 1966, shipping statistics have been compiled by the Commonwealth Bureau of Census and Statistics from returns submitted by shipping companies or their representatives to Customs Houses at the various seaports throughout Australia. A return is required for the departure of a vessel from a port as well as for its arrival at that port and shows the following details:

name of the port at which the return is submitted;
name of vessel;
type of shipping service (liner, tramp, bulkship, tanker);
port registered;
registered net tonnage;
last port of call (arrival) or next port of call (departure);
with cargo or in ballast;
date of arrival or date of departure;
ports of loading of cargo (arrival) or ports of discharge of cargo (departure);
quantity of cargo for each port of loading or discharge.

Prior to July 1966 returns were completed by officers of the Department of Customs and Excise at each port, the major differences then being that the system did not, in the main, rely on information supplied direct by shipping companies or their representatives, the detail on returns did not include information on type of shipping service or ports of loading and discharge of cargo.

Scope of the statistics

Arrivals and departures of vessels are treated separately in shipping statistics. Not all vessels are included in the statistics as returns are not required for (i) naval vessels; (ii) yachts and other craft used for pleasure; (iii) foreign fishing vessels that neither load nor discharge cargo; (iv) Australian registered fishing vessels operating from Australian ports; (v) geographical survey vessels, seismic survey vessels oceanographic survey vessels; (vi) offshore oil drilling rigs and vessels servicing them; (vii) vessels of 200 registered net tons and under.

Period covered by the statistics

Monthly shipping statistics relate to vessels arriving at and departing from each port in a calendar month. Annual statistics are published on a financial year basis.

Statistics of vessels

Statistics of vessels are compiled in terms of registered net tonnages. Net tonnage is expressed in units of 100 cubic feet (i.e. 100 cu ft equals 1 ton) and represents the volume of enclosed space which can be utilised for cargo or passengers.

Statistics of vessel movements

Returns show the last or next port of call of a vessel according to whether an arrival or departure at a port is being reported. Each vessel is classified to either the overseas or the coastal fleets serving Australia. This information, supplemented by the voyage of the vessel indicated by ports it visits to load or discharge cargo, is the basis on which each vessel movement is allocated to one of the following classifications: overseas direct; overseas via other States; interstate direct; interstate via ports in the same State; intrastate via ports in the same State.

Cargo loaded or discharged

Returns for arrivals show cargo discharged and for departures cargo loaded, in terms of units of weight or in terms of units of measurement, depending on the basis on which freight is charged. A ton measurement is a unit of 40 cubic feet. Cargo statistics show separate figures for cargo recorded in tons weight and cargo recorded in tons measurement.

Type of service

Overseas shipping cargo statistics are classified by type of service. Coastal shipping cargo statistics, on the other hand, combine all service types.

For overseas shipping, cargo shipped in liners is shown separately from cargo shipped in tramps, bulkships and tankers. A liner is a vessel which, on the voyage on which cargo is loaded or discharged at an Australian port, is operated by a common carrier in providing services on a specified route on a relatively regular basis.

Statistics of cargo shipped in liner services do not necessarily provide a measure of cargo carried by ships operating under shipping conference arrangements. For example, liner services may be provided by shipping companies which are not parties to conference agreements. Cargo may also be shipped under shipping conference conditions in vessels operating on a voyage charter basis for specific cargo, and, in the statistics, such cargo is classified as cargo shipped in tramp vessels.

Country of loading or discharge of overseas cargo

In statistics of overseas shipping cargo, country of loading or discharge of cargo is the country of location of the port where the cargo was loaded on to, or is to be discharged from, a reporting vessel. The countries shown are not necessarily the countries of origin or ultimate destination of cargo because previous or subsequent transhipments of cargo are not taken into account. The statistics of cargo classified by the country in which it was loaded or discharged cannot therefore be compared directly with statistics of overseas trade classified by country of origin or consignment.

Transhipments of cargo within Australia

The State of loading or discharge shown in the statistics is the State in which cargo is loaded on to, or discharged from, reporting vessels. Cargo loaded in a given State can therefore include cargo previously shipped interstate, while cargo discharged can include cargo which would subsequently be shipped interstate.

Overseas shipping

Total movement

The following table shows the number of entrances and clearances (combined) of vessels from and to overseas countries, and the aggregate net tonnage, during each of the years 1963–64 to 1967–68.

OVERSEAS SHIPPING: ENTRANCES AND CLEARANCES (COMBINED) OF VESSELS DIRECT, AUSTRALIA 1963-64 TO 1967-68

	1963–64	*1964–65*	*1965–66*	*1966–67 (a)*	*1967–68 (a)*
Number of vessels . .	7,477	7,601	7,958	7,994	7,985
Net tonnage '000 tons	41,640	43,295	46,382	55,062	60,387

(*a*) Excludes vessels of 200 net tons and under.

Particulars of the total overseas movement of shipping for each year from 1822 to 1920–21 were published in Year Book No. 15, page 507, those for each year from 1921–22 to 1950–51 in Year Book No. 40, page 97, and those for each year from 1941–42 in Year Book No. 54, page 1266.

Total overseas shipping, States, etc.

The following table shows, for each State and the Northern Territory, the number of entrances and clearances of vessels direct from and to overseas countries, and the aggregate net tonnage, during the year 1967–68.

OVERSEAS SHIPPING: ENTRANCES AND CLEARANCES OF VESSELS DIRECT, STATES AND NORTHERN TERRITORY, 1967–68(*a*)

		N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*Aust.*
Entrances . .	number	1,182	442	932	285	982	67	82	3,972
	'000 net tons	9,620	2,736	5,722	2,799	8,558	252	422	30,109
Clearances . .	number	1,102	497	1,027	225	1,066	45	51	4,013
	'000 net tons	9,134	5,055	5,919	1,023	8,666	183	298	30,278

(*a*) Excludes vessels of 200 net tons and under.

Country of registration of overseas shipping

Particulars of overseas shipping which entered Australian ports during each of the years 1965–66 to 1967–68 are given in the following table according to country of registration of vessels.

OVERSEAS SHIPPING: ENTRANCES DIRECT, BY COUNTRY OF REGISTRATION OF VESSELS AUSTRALIA, 1965–66 TO 1967–68

('000 net tons)

Vessels registered at ports in—	*1965–66*	*1966–67 (a)*	*1967–68 (a)*
Australia	141	368	261
Denmark	262	409	441
France(*b*)	540	432	556
Germany, Federal Republic of	590	454	447
Greece	1,384	1,746	1,421
Hong Kong	289	296	187
India	244	229	353
Italy	712	894	791
Japan	2,628	3,426	5,130
Liberia	2,643	3,979	5,391
Netherlands	1,020	1,135	1,067
New Zealand	375	375	305
Norway	3,291	3,703	3,720
Panama	423	648	756
Sweden	686	930	669
United Kingdom	7,109	7,576	7,468
United States of America	296	265	252
Other countries	409	579	894
All countries—			
In cargo	16,952	18,069	18,024
Proportion of total %	73.6	65.8	59.9
In ballast	6,090	9,375	12,085
Proportion of total %	26.4	34.2	40.1
Grand total	**23,042**	**27,444**	**30,109**

(*a*) Excludes vessels of 200 net tons and under. (*b*) Includes New Caledonia, 27 during 1965–66, 58 during 1966–67 2 during 1967–68.

Australian registered tonnage which entered Australian ports from overseas during the year 1967–68 represented 0.87 per cent of the total tonnage entered and was confined mainly to the New Zealand and Pacific Islands trade.

Interstate shipping

Interstate movement

Interstate direct. The following table shows the number of entrances and the net tonnage of vessels recorded into each State and the Northern Territory from any other State (including overseas vessels moving interstate direct) during each of the years 1965–66 to 1967–68.

INTERSTATE MOVEMENT: ENTRANCES OF VESSELS INTERSTATE DIRECT, STATES AND NORTHERN TERRITORY, 1965-66 TO 1967-68

	Number			*Net tons ('000)*		
State or Territory	*1965–66*	*1966–67 (a)*	*1967–68 (a)*	*1965–66*	*1966–67 (a)*	*1967–68 (a)*
New South Wales	1,976	1,757	1,836	7,889	7,626	7,972
Victoria	1,861	1,806	1,759	5,489	5,730	5,713
Queensland	806	803	820	2,670	2,785	2,921
South Australia	1,163	1,117	1,082	4,381	4,700	4,749
Western Australia	735	683	698	3,827	3,699	3,842
Tasmania	1,258	1,437	1,463	2,464	3,048	3,215
Northern Territory	81	72	93	147	200	219
Australia	7,880	7,675	7,751	26,867	27,789	28,631

(*a*) Excludes vessels of 200 net tons and under.

Overseas via States. The figures in the following table show the number of entrances and clearances of vessels to and from overseas countries via other Australian States, and their aggregate net tonnage.

INTERSTATE MOVEMENT: ENTRANCES AND CLEARANCES OF VESSELS OVERSEAS VIA OTHER AUSTRALIAN STATES AND NORTHERN TERRITORY, 1967-68(a)

		N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	Aust.
Entrances . .	number	873	1,024	267	430	96	146	8	2,844
	'000 net tons	4,426	7,107	1,126	2,081	543	635	39	15,957
Clearances . .	number	870	792	286	507	55	262	17	2,789
	'000 net tons	4,058	3,830	1,364	2,456	383	1,085	73	13,249

(a) Excludes vessels of 200 net tons and under.

Total interstate movement. To ascertain the aggregate movement of interstate shipping, including the interstate movement of overseas vessels, figures in the two preceding tables must be combined. The following table shows, for each State and the Northern Territory, the total number of entrances and clearances of vessels from and for other States (including the interstate movement of overseas vessels) during the year 1967–68 together with the aggregate net tonnage.

INTERSTATE MOVEMENT: TOTAL ENTRANCES AND CLEARANCES STATES AND NORTHERN TERRITORY, 1967-68(a)

		N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	Aust.
Entrances . .	number	2,709	2,783	1,087	1,512	794	1,609	101	10,595
	'000 net tons	12,398	12,820	4,047	6,830	4,385	3,850	258	44,588
Clearances . .	number	2,809	2,728	993	1,577	701	1,630	128	10,566
	'000 net tons	13,000	10,508	3,892	8,617	4,225	3,917	371	44,530

(a) Excludes vessels of 200 net tons and under.

The following table shows the total interstate movement of shipping, including overseas vessels travelling overseas via States and interstate direct, for Australia for each of the years 1963–64 to 1967–68.

INTERSTATE MOVEMENT: TOTAL ENTRANCES AND CLEARANCES AUSTRALIA, 1963-64 TO 1967-68

		1963–64	1964–65	1965–66	1966–67(a)	1967–68(a)
Entrances . .	number	11,040	11,172	11,113	10,536	10,595
	'000 net tons	40,747	42,569	43,644	43,272	44,588
Clearances . .	number	10,985	11,229	11,097	10,542	10,566
	'000 net tons	40,400	42,532	43,609	43,398	44,530

(a) Excludes vessels of 200 net tons and under.

Shipping engaged solely in interstate trade

The following table shows, for each State and the Northern Territory, the number of entrances direct from other States of vessels engaged solely in coastal trade (i.e. excluding overseas vessels in continuation of their overseas voyages) during the year 1967–68, together with the net tonnage.

SHIPPING ENGAGED SOLELY IN INTERSTATE TRADE: ENTRANCES, STATES AND NORTHERN TERRITORY, 1967-68(a)

		N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	Aust.
Entrances .	number	1,155	1,219	314	775	326	1,286	84	5,159
Net tons .	. '000	4,754	2,718	808	3,095	1,641	2,501	178	15,695

(a) Excludes vessels of 200 net tons and under.

Australian trading vessels

The following table shows particulars of all Australian trading vessels of 200 gross tons or more engaged in the regular overseas, interstate or intrastate services at 31 December 1968.

AUSTRALIAN TRADING VESSELS OF 200 GROSS TONS OR MORE
31 DECEMBER 1968

(*Source*: Department of Shipping and Transport)

Vessels	*Number*	*Dead-weight tons*	*Gross tons*
Interstate vessels—			
Australian-owned, Australian-registered	89	769,955	571,303
Overseas-owned, Australian-registered, engaged in Australian coastal trade—New Zealand-owned	9	26,674	23,678
Other	9	157,992	110,666
Overseas-owned, overseas-registered, on charter, engaged in Australian coastal trade	2	70,791	47,605
Total interstate vessels	109	1,025,412	753,252
Intrastate vessels	19	26,831	22,603
Total coastal trading vessels	*128*	*1,052,243*	*775,855*
Overseas trading vessels—			
Australian-owned, Australian-registered operated mainly on overseas services	6	18,617	15,509
Australian-owned, overseas-registered operated wholly on overseas services	8	75,690	56,768
Total overseas trading vessels	*14*	*94,307*	*72,277*
Total Australian trading vessels	**142**	**1,146,550**	**848,132**

Shipping at principal ports

For details of Harbour Boards and Trusts in each State *see* the chapter Local Government.

The following table shows the total volume of shipping—overseas, interstate and coastal—which entered the principal ports of Australia during the years 1966–67 and 1967–68.

TOTAL SHIPPING: ENTRANCES AT PRINCIPAL PORTS, AUSTRALIA 1966-67 AND 1967-68

Port of entry	*1966–67(a)*		*1967–68(a)*	
	Number	*Net tons*	*Number*	*Net tons*
		'000		'000
New South Wales—				
Sydney(*b*)	4,052	16,901	4,174	17,997
Newcastle	1,810	6,241	1,778	6,635
Port Kembla	986	5,190	1,049	5,129
Victoria—				
Melbourne	2,910	12,318	2,857	12,301
Geelong	583	3,648	499	3,508
Queensland—				
Brisbane	1,466	6,621	1,485	6,638
Bowen	21	98	25	104
Cairns	207	635	210	619
Gladstone	160	1,319	224	2,378
Mackay	156	654	172	625
Rockhampton	98	415	121	517
Townsville	322	1,193	336	1,264
South Australia—	(*c*)	(*c*)		
Adelaide(*d*)	2,055	7,624	1,548	7,316
Port Lincoln	341	671	252	648
Port Pirie	435	937	212	842
Rapid Bay	71	248	45	171
Wallaroo	38	194	27	129
Whyalla	399	2,011	386	2,206
Western Australia—				
Fremantle(*e*)	1,392	8,188	1,404	8,662
Albany	159	798	184	947
Bunbury	157	757	157	760
Carnarvon	15	22	17	29
Geraldton	159	688	154	756
Yampi	185	1,267	158	971
Tasmania—				
Hobart	559	1,572	544	1,529
Burnie	536	1,389	548	1,387
Devonport	362	716	424	818
Launceston	430	1,368	391	1,254
Northern Territory—				
Darwin	133	388	154	534

(*a*) Excludes vessels of 200 net tons and under except for South Australian ports. (*b*) Includes Botany Bay. (*c*) Figures supplied by Department of Marine and Harbours, South Australia. Vessels of 200 net tons and under *not* excluded. (*d*) Includes Port Stanvac. (*e*) Includes Kwinana.

The following table shows the total shipping tonnage which entered the principal ports of Australia, New Zealand and the United Kingdom during 1967–68.

TOTAL SHIPPING: ENTRANCES AT PORTS. AUSTRALIA, NEW ZEALAND AND THE UNITED KINGDOM, 1967-68

('000 net tons)

Port	*Net tonnage entered*	*Port*	*Net tonnage entered*	*Port*	*Net tonnage entered*
AUSTRALIA—		NEW ZEALAND—		ENGLAND AND WALES—*continued*	
Sydney (N.S.W.)(*a*)	17,997	Wellington	5,193	Dover	11,418
Melbourne (Vic.)	12,301	Auckland	4,838	Manchester (including Runcorn)	7,591
Fremantle (W.A.)(*b*)	8,662	Lyttleton	2,977	Tyne Ports	6,782
Adelaide (S.A.)(*c*)	7,316	Whangarei	2,212	Hull	7 068
Brisbane (Qld)	6,638	Otago	1,068	Middlesbrough	6,098
Newcastle (N.S.W.)	6,635	Napier	1,366	Bristol	5 473
Port Kembla (N.S.W.)	5,129	Bluff	969	Swansea	3,661
Geelong (Vic.)	3,508	Taranaki	781	Cardiff	2,688
Whyalla (S.A.)	2,206	Tauranga	1,550		
Hobart (Tas.)	1,529				
Burnie (Tas.)	1,387	ENGLAND AND WALES—		SCOTLAND—	
Launceston (Tas.)	1,254	London	44,056	Glasgow	6,510
Gladstone (Qld)	2,378	Southampton	26,362		
Yampi (W.A.)	971	Liverpool (including Birkenhead)	19,480	NORTHERN IRELAND—	
Townsville (Qld)	1,264			Belfast	9,171

(*a*) Includes Botany Bay. (*b*) Includes Kwinana. (*c*) Includes Port Stanvac.

Shipping cargo

Overseas and interstate cargo

The table on page 376 shows the aggregate tonnage of overseas and interstate cargo discharged and shipped at Australian ports.

CARGO DISCHARGED AND SHIPPED: AUSTRALIA, 1963-64 TO 1967-68

('000 tons)

	Overseas cargo				*Interstate cargo*			
	Discharged		*Shipped*		*Discharged*		*Shipped*	
Year	*Weight*	*Meas.*	*Weight*	*Meas.*	*Weight*	*Meas.*	*Weight*	*Meas.*
1963–64	20,788	3,942	19,744	1,861	15,321	1,453	15,632	1.208
1964–65	23,211	4,443	20,424	1,980	15,447	1,722	16,360	1,402
1965–66	24,156	4,119	21,749	2,043	15,349	1,942	16,172	1,484
1966–67	27,109	4,152	32,691	1,943	15,565	1,900	15,692	1,728
1967–68	27,572	4,684	41,339	2,102	16,980	2,079	17,207	1,876

CARGO DISCHARGED AND SHIPPED AT PRINCIPAL PORTS, 1967-68

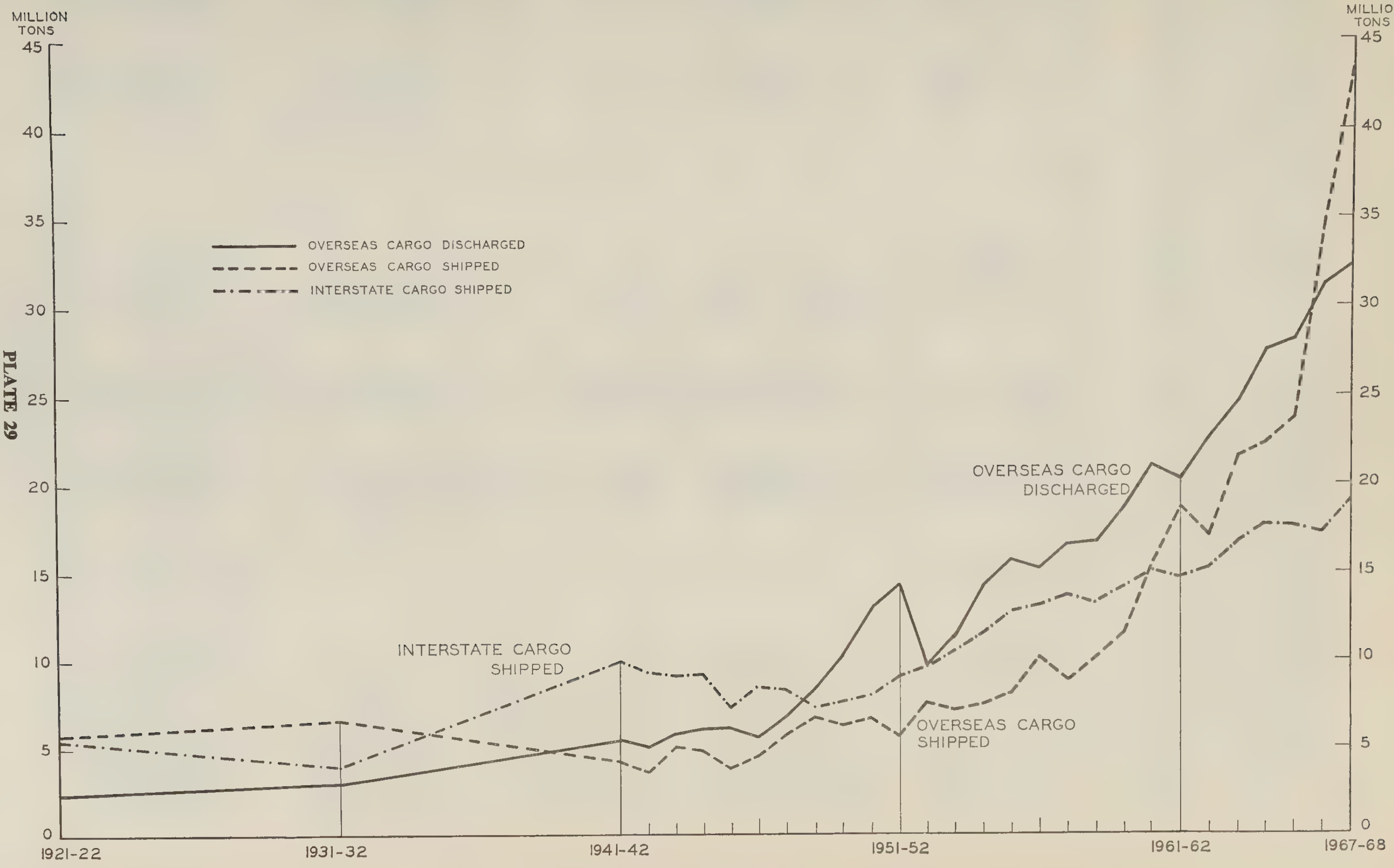
('000 tons)

Port	*Overseas cargo*				*Interstate cargo*			
	Discharged		*Shipped*		*Discharged*		*Shipped*	
	Weight	*Meas.*	*Weight*	*Meas.*	*Weight*	*Meas.*	*Weight*	*Meas.*
New South Wales—								
Sydney	3,169	1,946	4,801	645	1,044	133	268	191
Botany Bay	4,097	..	135	..	318	..	251	..
Newcastle	752	11	5,496	1	2,921	..	1,317	1
Port Kembla	682	3	2,309	5	4,993	..	1,517	..
Other	..	..	16	..	33	..	11	1
Total, New South Wales	*8,701*	*1,961*	*12,757*	*651*	*9,309*	*133*	*3,364*	*193*
Victoria—								
Melbourne	3,489	1,679	1,093	662	1,565	747	505	827
Geelong	3,788	57	822	10	753	..	554	..
Portland	24	..	39	1	77	..	..	..
Westernport	1,173	..	83	..	69	..	357	..
Other	..	..	..	..	..	..	..	..
Total, Victoria	*8,474*	*1,736*	*2,037*	*673*	*2,464*	*747*	*1,416*	*827*
Queensland—								
Brisbane	2,447	324	1,166	119	317	25	109	18
Cairns	78	..	293	3	18	5	21	5
Gladstone	69	..	2,967	..	37	..	30	..
Mackay	31	..	606	..	11	3	33	..
Townsville	37	15	627	..	66	9	71	3
Other	7	2	2,274	1	7	1	640	..
Total, Queensland	*2,669*	*341*	*7,933*	*123*	*457*	*43*	*906*	*26*
South Australia—								
Port Adelaide	583	298	412	198	946	25	238	13
Ardrossan	..	..	18	..	..	..	335	..
Port Lincoln	103	..	184	..	26	..	410	..
Port Pirie	2	..	526	..	157	..	219	..
Port Stanvac	1,925	..	48	..	32	..	348	..
Rapid Bay	..	..	..	..	..	..	139	..
Whyalla	105	..	437	1	906	..	4,174	..
Other	44	..	456	2	21	..	353	..
Total, South Australia	*2,762*	*298*	*2,081*	*201*	*2,087*	*25*	*6,216*	*13*
Western Australia—								
Fremantle	907	271	2,117	159	729	168	1,072	54
Albany	201	..	342	20	26	1	4	..
Bunbury	157	..	606	24	16	..	50	..
Dampier	107	10	6,925	..	6	4	..	..
Geraldton	134	..	1,137	..	..	..	4	..
Kwinana	2,835	..	242	..	86	..	570	..
Port Headland	37	2	3,939	..	79	..	..	..
Yampi	3	..	134	..	..	..	1,948	..
Other	123	5	241	..	43	..	855	6
Total, Western Australia	*4,504*	*288*	*15,683*	*203*	*985*	*173*	*4,503*	*60*
Tasmania—								
Hobart	146	21	70	194	568	181	282	114
Burnie	57	3	58	11	243	196	66	170
Launceston	42	15	31	27	584	163	112	121
Port Latta	..	..	107	..	12	..	..	..
Other	16	2	7	17	175	373	225	350
Total, Tasmania	*261*	*41*	*273*	*249*	*1,582*	*913*	*685*	*755*
Northern Territory—								
Darwin	201	19	351	3	96	44	1	2
Groote Island	..	..	223	..	..	..	116	..
Gove	..	..	..	..	..	..	..	..
Other	..	..	2	..	..	..	..	..
Total Northern Territory	*201*	*19*	*576*	*3*	*96*	*44*	*117*	*2*
Australia	**27,572**	**4,682**	**41,339**	**2,102**	**16,980**	**2,079**	**17,207**	**1,876**

PLATE 29

OVERSEAS AND INTERSTATE SHIPPING CARGO: AUSTRALIA

1921-22 TO 1967-68



Overseas cargo according to major trade areas and type of service

The tables on pages 378–81 show for the year 1967–68 particulars of the cargo loaded in Australia for discharge overseas, and of the cargo discharged in Australia from overseas, for each State and the Northern Territory, classified according to the major trade areas of the world, by type of shipping service (i.e. liner, or tramp, bulkship, and tanker).

NOTE. The year 1966–67 is the first for which this information is available. Figures for 1966–67 published on pages 402–5 of Year Book No. 54 have since been revised because of a shift in classification between the categories Liners, and Tramps, bulk-ships, tankers (totals for All vessels were not affected). For revised 1966–67 figures reference should be made to the bulletin *Transport and Communication*, 1966–67, *No.* 58.

CARGO LOADED IN AUSTRALIA FOR DISCHARGE OVERSEAS: MAJOR TRADE AREAS BY TYPE OF SERVICE: STATES AND NORTHERN TERRITORY, 1967-68

(Tons)

State or Territory of loading	*Liners(a)*		*Tramps, bulk-ships, tankers*		*All vessels*	
	Weight	*Meas.*	*Weight*	*Meas.*	*Weight*	*Meas.*
NORTH AMERICA AND HAWAII						
New South Wales	133,006	25,050	220,267	. .	353,273	25,050
Victoria	131,492	63,374	20,301	. .	151,793	63,374
Queensland	162,748	9,184	1,300,034	. .	1,462,782	9,184
South Australia	59,670	14,207	29,284	312	88,954	14,519
Western Australia	39,677	4,475	256,772	. .	296,449	4,475
Tasmania	22,484	3,315	. .	. .	22,484	3,315
Northern Territory	5,742	1	61,341	. .	67,083	1
Australia	*554,819*	*119,606*	*1,887,999*	*312*	*2,442,818*	*119,918*
SOUTH AMERICA						
New South Wales	41,229	1,218	300,463	. .	341,692	1,218
Victoria	11,016	3,452	30	124	11,046	3,576
Queensland	12,784	259	10,032	34	22,816	293
South Australia	463	3,060	3,529	. .	3,992	3,060
Western Australia	. .	. .	. .	. .	. .	. .
Tasmania	. .	. .	. .	. .	. .	. .
Northern Territory	. .	. .	. .	. .	. .	. .
Australia	*65,492*	*7,989*	*314,054*	*158*	*379,546*	*8,147*
EUROPE (INCLUDING U.S.S.R.)						
New South Wales	288,573	59,361	890,125	10	1,178,698	59,371
Victoria	226,202	275,519	25,262	7,930	251,464	283,449
Queensland	316,994	21,786	1,043,895	277	1,360,889	22,063
South Australia	142,225	88,213	343,069	1	485,294	88,214
Western Australia	109,158	61,919	2,130,067	6,467	2,239,225	68,386
Tasmania	37,339	150,237	15,840	55,506	53,179	205,743
Northern Territory	. .	. .	60,315	. .	60,315	. .
Australia	*1,120,491*	*657,035*	*4,508,573*	*70,191*	*5,629,064*	*727,226*
AFRICA						
New South Wales	44,070	11,721	91,332	. .	135,402	11,721
Victoria	31,226	22,101	1,117	585	32,343	22,686
Queensland	30,117	29	46,933	. .	77,050	29
South Australia	23,581	15,354	61,518	376	85,099	15,730
Western Australia	9,180	10,726	45,637	. .	54,817	10,726
Tasmania	5,696	1,450	. .	. .	5,696	1,450
Northern Territory	. .	. .	. .	2,211	. .	2,211
Australia	*143,870*	*61,381*	*246,537*	*3,172*	*390,407*	*64,553*

(*a*) Cargo and passenger liners.

CARGO LOADED IN AUSTRALIA FOR DISCHARGE OVERSEAS: MAJOR TRADE AREAS BY TYPE OF SERVICE: STATES AND NORTHERN TERRITORY, 1967–68—*continued*

(Tons)

State or Territory of loading	*Liners(a)*		*Tramps, bulk-ships, tankers*		*All vessels*	
	Weight	*Meas.*	*Weight*	*Meas.*	*Weight*	*Meas.*
ASIA						
New South Wales . .	494,808	137,064	9,451,755	52,257	9,946,563	189,321
Victoria	390,866	142,504	860,811	8,750	1,251,677	151,254
Queensland	210,256	25,755	4,609,955	640	4,820,211	26,395
South Australia . . .	188,864	38,762	1,054,338	2,099	1,243,202	40,861
Western Australia . .	652,194	58,282	12,252,969	52,550	12,905,163	110,832
Tasmania	79,178	30,632	108,464	3,122	187,642	33,754
Northern Territory . .	25,961	204	422,648	619	448,609	823
Australia . . .	*2,042,127*	*433,203*	*28,760,940*	*120,037*	*30,803,067*	*553,240*
PAPUA AND NEW GUINEA, NEW ZEALAND AND PACIFIC ISLANDS						
New South Wales . .	402,215	356,797	398,337	2,281	800,552	359,078
Victoria	20,728	145,061	317,182	2,114	337,910	147,175
Queensland	32,207	62,555	156,799	1,936	189,006	64,491
South Australia . . .	116,765	38,458	57,196	21	173,961	38,479
Western Australia . .	5,575	1,434	156,910	..	162,485	1,434
Tasmania	3,989	5,002	8	60	3,997	5,062
Northern Territory . .	..	..	..	..	..	..
Australia . . .	*581,479*	*609,307*	*1,086,432*	*6,412*	*1,667,911*	*615,719*
INDIAN OCEAN ISLANDS AND ANTARCTIC AREA						
New South Wales . .	..	..	405	5,355	405	5,355
Victoria	..	..	1,079	1,236	1,079	1,236
Queensland	..	..	6	57	6	57
South Australia . . .	..	..	135	9	135	9
Western Australia . .	6	220	24,620	6,179	24,626	6,399
Tasmania	..	..	..	..	..	..
Northern Territory . .	..	..	..	..	..	..
Australia . . .	*6*	*220*	*26,245*	*12,836*	*26,251*	*13,056*
TOTAL						
New South Wales . .	1,403,901	591,211	11,352,684	59,903	12,756,585	651,114
Victoria	811,530	652,011	1,225,782	20,739	2,037,312	672,750
Queensland	765,106	119,568	7,167,654	2,944	7,932,760	122,512
South Australia . . .	531,568	198,054	1,549,069	2,818	2,080,637	200,872
Western Australia . .	815,790	137,056	14,866,975	65,196	15,682,765	202,252
Tasmania	148,686	190,636	124,312	58,688	272,998	249,324
Northern Territory . .	31,703	205	544,304	2,830	576,007	3,035
Australia . . .	**4,508,284**	**1,888,741**	**36,830,780**	**213,118**	**41,339,064**	**2,101,859**

(*a*) Cargo and passenger liners.

CARGO DISCHARGED IN AUSTRALIA FROM OVERSEAS: MAJOR TRADE AREAS BY TYPE OF SERVICE, STATES AND NORTHERN TERRITORY, 1967-68

(Tons)

State or Territory of unloading	*Liners(a)*		*Tramps, bulk-ships, tankers*		*All vessels*	
	Weight	*Meas.*	*Weight*	*Meas.*	*Weight*	*Meas.*
			NORTH AMERICA AND HAWAII			
New South Wales	133,339	310,917	506,283	177,727	639,622	488,644
Victoria	90,595	233,208	636,722	103,748	727,317	336,956
Queensland	34,065	46,251	241,649	8,407	275,714	54,658
South Australia	33,843	41,062	127,221	69,246	161,064	110,308
Western Australia	36,214	24,132	258,659	11,505	294,873	35,637
Tasmania	12,833	1,690	82,551	261	95,384	1,951
Northern Territory	2	182	2,487	..	2,489	182
Australia	*340,891*	*657,442*	*1,855,572*	*370,894*	*2,196,463*	*1,028,336*
			SOUTH AMERICA			
New South Wales	5,643	2,068	9,566	552	15,209	2,620
Victoria	7,966	337	2,620	..	10,586	337
Queensland	12,355	172	951	2,906	13,306	3,078
South Australia	1,215	..	500	..	1,715	..
Western Australia	..	..	676	..	676	..
Tasmania	592	..	..	..	592	..
Northern Territory	..	..	..	..	..	..
Australia	*27,771*	*2,577*	*14,313*	*3,458*	*42,084*	*6,035*
			EUROPE (INCLUDING U.S.S.R.)			
New South Wales	259,330	596,875	23,068	47,476	282,398	644,351
Victoria	190,061	645,496	21,868	60,323	211,929	705,819
Queensland	57,907	70,400	28,031	5,090	85,938	75,490
South Australia	61,037	79,645	3,478	2,310	64,515	81,955
Western Australia	50,087	108,547	40,491	11,494	90,578	120,041
Tasmania	32,856	14,694	9,978	1,910	42,834	16,604
Northern Territory	..	..	10,304	..	10,304	..
Australia	*651,278*	*1,515,657*	*137,218*	*128,603*	*788,496*	*1,644,260*
			AFRICA			
New South Wales	55,693	20,916	3,691	234	59,384	21,150
Victoria	13,525	21,807	38,211	6,859	51,736	28,666
Queensland	12,073	9	1,827	73	13,900	82
South Australia	3,499	6,190	..	..	3,499	6,190
Western Australia	4,996	5,747	149,544	..	154,540	5,747
Tasmania	3,166	109	7,183	..	10,349	109
Northern Territory	..	..	..	..	..	..
Australia	*92,952*	*54,778*	*200,456*	*7,166*	*293,408*	*61,944*

(a) Cargo and passenger liners.

CARGO DISCHARGED IN AUSTRALIA FROM OVERSEAS: MAJOR TRADE AREAS BY TYPE OF SERVICE, STATES AND NORTHERN TERRITORY, 1967–68—*continued*

(Tons)

State or Territory of unloading	*Liners(a)*		*Tramps, bulk-ships, tankers*		*All vessels*	
	Weight	*Meas.*	*Weight*	*Meas.*	*Weight*	*Meas.*
ASIA						
New South Wales	130,309	529,865	6,735,114	135,141	6,865,423	665,006
Victoria	118,541	473,088	6,593,867	56,976	6,712,408	530,064
Queensland	42,875	134,466	2,072,966	33,307	2,115,841	167,773
South Australia	45,514	84,244	2,074,278	9,601	2,119,792	93,845
Western Australia	52,526	92,279	3,119,273	26,522	3,171,799	118,801
Tasmania	3,711	13,660	13,543	4,215	17,254	17,875
Northern Territory	2,308	9,119	185,605	9,931	187,913	19,050
Australia	*395,784*	*1,336,721*	*20,794,646*	*275,693*	*21,190,430*	*1,612,414*
PAPUA AND NEW GUINEA, NEW ZEALAND AND PACIFIC ISLANDS						
New South Wales	145,637	138,045	516,009	649	661,646	138,694
Victoria	15,748	133,235	436,487	333	452,235	133,568
Queensland	15,164	39,770	116,258	40	131,422	39,810
South Australia	15,423	6,084	271,464	2	286,887	6,086
Western Australia	10,223	2,966	493,437	3,351	503,660	6,317
Tasmania	25,106	4,723	53,177	..	78,283	4,723
Northern Territory	178	318	413	..	591	318
Australia	*227,479*	*325,141*	*1,887,245*	*4,375*	*2,114,724*	*329,516*
INDIAN OCEAN ISLANDS AND ANTARCTIC AREA						
New South Wales	..	..	177,546	106	177,546	106
Victoria	..	..	308,219	..	308,219	..
Queensland	..	..	33,277	9	33,277	9
South Australia	..	..	124,044	..	124,044	..
Western Australia	..	170	287,433	1,484	287,433	1,654
Tasmania	..	..	16,034	..	16,034	..
Northern Territory	..	..	..	..	..	..
Australia	..	*170*	*946,553*	*1,599*	*946,553*	*1,769*
TOTAL						
New South Wales	729,951	1,598,686	7,971,277	361,885	8,701,228	1,960,571
Victoria	436,436	1,507,171	8,037,994	228,239	8,474,430	1,735,410
Queensland	174,439	291,068	2,494,959	49,832	2,669,398	340,900
South Australia	160,531	217,225	2,600,985	81,159	2,761,516	298,384
Western Australia	154,046	233,841	4,349,513	54,356	4,503,559	288,197
Tasmania	78,264	34,876	182,466	6,386	260,730	41,262
Northern Territory	2,488	9,619	198,809	9,931	201,297	19,550
Australia	1,736,155	3,892,486	25,836,003	791,788	27,572,158	4,684,274

(*a*) Cargo and passenger liners.

Overseas cargo according to country of registration of vessels

The following table shows the total overseas cargo, discharged and shipped combined, according to the country in which the vessels were registered, during each of the years 1965–66 to 1967–68.

OVERSEAS CARGO DISCHARGED AND SHIPPED, BY COUNTRY OF REGISTRATION OF VESSELS: AUSTRALIA, 1965–66 TO 1967–68
('000 tons)

Vessels registered at ports in—	*1965–66*		*1966–67*		*1967–68*	
	Weight	*Meas.*	*Weight*	*Meas.*	*Weight*	*Meas.*
Australia	231	125	714	144	475	154
Denmark	519	66	799	93	946	125
France and New Caledonia	1,089	97	891	108	1,012	91
Germany, Federal Republic of	1,393	316	843	349	914	339
Greece	2,700	85	3,772	103	3,006	113
Hong Kong	621	139	634	108	378	93
India	479	42	497	38	757	53
Italy	560	60	771	36	577	63
Japan	5,803	434	9,076	539	15,000	630
Liberia	6,045	85	9,854	76	13,921	128
Netherlands	2,003	385	2,518	355	2,226	407
New Zealand	675	464	668	440	527	463
Norway	8,129	364	10,023	354	10,376	458
Panama	908	48	1,567	24	1,690	17
Sweden	1,632	351	2,136	412	1,453	581
United Kingdom	12,090	2,937	13,674	2,626	13,379	2,719
United States of America	204	94	232	130	231	162
Other	824	70	1,131	160	2,043	190
Grand total	**45,905**	**6,162**	**59,800**	**6,095**	**68,911**	**6,786**

World shipping tonnage

At 1 July 1968 the total number of steamships and motorships 100 gross tons and upwards throughout the world was 47,444 with a gross tonnage of 194,152,378. Of those totals, steamships numbered 9,363 for 74,263,159 gross tons, and motorships 38,081 for 119,889,219 gross tons. This includes 5,644 oil tankers of 100 gross tons and upwards with a gross tonnage of 69,213,950. Australian steamships and motorships, 314 for 818,247 gross tons, constituted 0.66 per cent and 0.42 per cent respectively of the total number and gross tonnage. This information has been derived from *Lloyd's Register of Shipping.*

Vessels registered in Australia

The following table shows the number and gross tonnage of trading vessels of 200 tons and over registered in Australia at 30 June 1968, classified according to: (i) year of construction, (ii) type of trade in which the vessels were engaged, and (iii) vessels built in Australian or in overseas shipyards.

AUSTRALIAN-REGISTERED TRADING VESSELS, 31 DECEMBER 1968(*a*)
(*Source:* Department of Shipping and Transport)

	Overseas and interstate vessels		*Intrastate vessels*		*Built in Australian yards*		*Built overseas*		*Total*	
Year of construction	*No.*	*Gross tons*	*No.*	*Gross tons*	*No.*	*Gross tons*	*No.*	*Gross tons*	*No.*	*Gross tons*
1964 and earlier	103	543,217	14	19,134	65	368,192	52	194,159	117	562,351
1965	4	33,906	1	499	3	29,716	2	4,689	5	34,405
1966	1	33,774	2	2,445	3	36,219	..	..	3	36,219
1967	2	47,021	1	204	3	47,225	..	..	3	47,225
1968	3	63,238	1	321	4	63,559	..	..	4	63,559
Total registered in Australia	**113**	**721,156**	**19**	**22,603**	**78**	**544,911**	**54**	**198,848**	**132**	**743,759**

(*a*) 200 gross tons and over.

Miscellaneous

Shipping freight rates

The *Quarterly Summary of Australian Statistics* shows a list of the current freight rates for general merchandise in respect of both overseas and interstate shipments. The following table shows the freight rates from Australia to various countries for certain important commodities at 31 December 1968.

OVERSEAS SHIPPING FREIGHT RATES FOR LINER SERVICES: AUSTRALIA TO VARIOUS COUNTRIES, 31 DECEMBER 1968(*a*)

(1 ton measurement = 40 cubic feet)

Country and commodity	*Unit for which freight rate is quoted*	*Freight rate quoted*
CANADA—EAST COAST AND ST LAWRENCE PORTS TO MONTREAL—		*Canadian dollars*
Fruit—		
Canned	Ton measurement	44.00
Dried	Ton measurement	36.50
Preserved	Ton measurement	47.50
Wine	Ton measurement	52.30
Wool—greasy	100 lb	5.80
General cargo	Ton weight or measurement	55.00
CANADA WEST COAST—*See* U.S.A. WEST COAST and HAWAII		
CEYLON—		*Australian dollars*
Flour, wheaten	Ton weight	21.45
Malted milk	Ton measurement	30.03
General cargo	Ton weight or measurement	36.66
CHINA, REPUBLIC OF (FORMOSA), CHINA (MAINLAND), HONG KONG, JAPAN (MAIN PORTS)(*b*), PHILIPPINES (CEBU and MANILA)—		*U.S. dollars*
Butter	100 lb	3.73
Concentrates, copper, lead and zinc—		
Bulk	Ton weight	(*c*)14.60
Bags and drums	Ton weight	20.20
Fruit—		
Dried (cartons, cases)	Ton measurement	22.40
Canned (cartons)	Ton weight or measurement	24.65
Malt	Ton weight	19.05
Meats—		
Lamb carcases	100 lb	4.67
Mutton carcases	100 lb	3.51
Beef, chilled	100 lb	7.36
Milk, powdered (cases, drums)	Ton weight or measurement	27.45
Rutile and zircon (bulk)	Ton weight	(*c*)12.35
Steel billets, sheets, corrugated	Ton weight	16.80
Steel plates	Ton weight	20.20
Lead ingots (bundles)	Ton weight	18.50
Tallow in drums or casks	Ton weight	30.80
Wool—		
Greasy	100 lb	2.80
Japan	100 lb	3.08
South Korea	100 lb	3.27
Scoured	100 lb	3.26
Japan	100 lb	3.56
South Korea	100 lb	3.73
General cargo	Ton weight or measurement	30.80

(*a*) Excludes rates for commodities shipped in chartered vessels and bulkships. (*b*) Nagasaki, Kure, Moji, Kobe, Osaka, Nagoya, Yokkaichi Shimizu, Yokahama. (*c*) Loaded and trimmed at no cost to shipping company.

OVERSEAS SHIPPING FREIGHT RATES FOR LINER SERVICES: AUSTRALIA TO VARIOUS COUNTRIES, 31 DECEMBER 1968(*a*)—*continued*

Country and commodity	*Unit for which freight rate is quoted*	*Freight rate quoted*
		Australian dollars
INDIA—		
Milk products in cases, cartons, etc.	Ton measurement	29.01
Wheat in bags	Ton weight	21.86
Wool—		
Greasy	100 lb	3.753
Scoured, etc.	100 lb	3.808
Zinc bars	Ton weight	17.54
General cargo	Ton weight or measurement	34.07
INDONESIA—		
Flour—		
From eastern Australian ports	2,000 lb	18.70
From Western Australian ports	2,000 lb	17.60
General cargo—		
From eastern Australian ports	Ton weight or measurement	28.90
From Western Australian ports	Ton weight or measurement	26.70
NEW ZEALAND(*b*)—		*New Zealand dollars*
Fruit—		
Dried	Ton measurement	21.20
Fresh—Oranges (refrigerated)	Case (1 ft 7 in)	0.98
Textile piecegoods	Ton weight or measurement	21.20
Iron and steel—		
Bars, rods, angles, tees (up to 30 ft long)	Ton weight	19.80
Pipes and tubes (up to 20 ft long)	Ton weight	17.25
Plate (up to 20 ft long)	Ton weight	19.80
Sheet (bundles)	Ton weight	16.05
Wire, lattice	Ton measurement	21.20
Lead oxide	Ton weight	20.30
Zinc oxide	Ton weight	20.30
Copper—		
Bars and rods (up to 30 ft long)	Ton weight	19.80
Pipes and tubes (up to 20 ft long)	Ton weight	17.25
Plate (up to 20 ft long)	Ton weight	19.80
Sheet (bundles)	Ton weight	16.05
Motor vehicles—		
Assembled	Ton measurement	13.65
Unassembled	Ton measurement	21.20
Parts	Ton measurement	21.20
Household machines	Ton weight or measurement	21.20
Timber (up to 20 ft long)	100 super ft	5.45
Books and periodicals	Ton weight or measurement	21.20
Drugs and medicinal preparations	Ton weight or measurement	21.20
Sodium pentachlorphenate	Ton weight or measurement	22.30
Fertiliser, manure	Ton weight	20.65
Plastic foam	Ton measurement	18.50
General cargo	Ton weight or measurement	21.20

SINGAPORE AND WEST MALAYSIA FROM PORTS IN—

		Eastern Australia	Western Australia
		Australian dollars	
Butter	100 lb	3.75	3.50
Flour, plain—bagged	2,000 lb	18.15	17.05
Fruit, fresh—			
Apples and pears (refrigerated)	Package (1.85 cu ft and under)	1.40	1.30
Oranges (refrigerated)	Bushel case	1.45	1.35
Hardboard/wallboard	Ton weight or measurement	18.70	17.60

(*a*) Excludes rates for commodities shipped in chartered vessels and bulkships. (*b*) Rates quoted are from Melbourne, Sydney, Newcastle and Port Kembla to New Zealand main ports except Bluff, which is an additional 50c per ton.

OVERSEAS SHIPPING FREIGHT RATES FOR LINER SERVICES: AUSTRALIA TO VARIOUS COUNTRIES, 31 DECEMBER 1968(*a*)—*continued*

Country and commodity	*Unit for which freight rate is quoted*	*Freight rate quoted*	
SINGAPORE AND WEST MALAYSIA FROM PORTS IN—*continued*		Eastern Australia	Western Australia
		Australian dollars	
Iron and steel—			
Black plate and tin mill and secondaries	Ton weight	21.45	..
Sheets—galvanised, black, flat or corrugated	Ton weight	18.70	..
Milk—			
Condensed	Ton measurement	26.95	..
Powdered (in bags)	Ton weight	33.55	31.35
Mutton carcases and sides	100 lb	3.75	3.50
Medical and pharmaceutical products	Ton weight or measurement	28.90	26.70
General cargo	Ton weight or measurement	28.90	26.70
			Australian dollars
SOUTH AFRICA—			
Butter	56 lb box		1.68
Beef (carcases, sundries in bags)	100 lb		4.22
Cattle hides, wet salted (loose, bags, etc.)	100 lb		2.28
Wool, greasy (dumped)	100 lb (gross)		4.22
Inedible tallow (in drums or casks)	Ton weight		34.70
Malt in bags or drums	Ton weight		30.75
Medical and pharmaceutical products	Ton weight or measurement		32.50
Motor vehicles—			
Passenger motor cars, assembled or C.K.D.	Ton weight or measurement		29.05
Motor vehicle components	Ton weight or measurement		32.50
Motor vehicle replacement parts	Ton weight or measurement		32.50
Timber—			
Railway or tramway sleepers (up to 30 ft long)	50 cu ft		38.10
Sawn jarrah timber (up to 40 ft long)	50 cu ft		39.55
Zinc (ingots)	Ton weight		20.00
General cargo	Ton weight or measurement		32.50
			U.S. dollars (except for apples and pears)
UNITED KINGDOM AND CONTINENTAL EUROPE—			
Butter (refrigerated)	56 lb box		(*b*)1.80
Cheese (refrigerated)	Ton weight		(*b*)74.76
Eggs in shell	Ton measurement		53.39
Meats, preserved by cold process—			
Beef, refrigerated	100 lb		4.80
Lamb	100 lb		5.95
Mutton	100 lb		4.80
Beef, carton	100 lb		3.47
Lamb, carton	100 lb		3.47
Mutton, carton	100 lb		3.47
Rabbits	Ton measurement		44.03
Sausage casings in casks (refrigerated)	Ton measurement		58.13
Sausage casings (not refrigerated)	Ton measurement		34.05
Meats, not frozen	Ton weight		34.05
Milk and cream condensed	Ton measurement		34.05
Fruit—			
Canned	Ton measurement		(*b*)26.64
Dried	Ton measurement		(*b*)26.64
Fresh—			
Apples	Standard bushel case		(*b*)£stg0.900
Citrus	Standard bushel case		(*b*)2.14
Pears	Standard bushel case		(*b*)£stg0.900
Pears	¾ bushel case		(*b*)£stg0.823
Grapes, grapefruit, oranges, lemons and plums—	Standard bushel case		(*b*)2.14
	¾ bushel case		(*b*)1.99
	½ bushel case		(*b*)1.43
	½ bushel carton		(*b*)1.33

(*a*) Excludes rates for commodities shipped in chartered vessels and bulkships. (*b*) Plus 6 per cent Suez surcharge.

OVERSEAS SHIPPING FREIGHT RATES FOR LINER SERVICES: AUSTRALIA TO VARIOUS COUNTRIES, 31 DECEMBER 1968(*a*)—*continued*

Country and commodity	*Unit for which freight rate is quoted*	*Freight rate quoted*
UNITED KINGDOM AND CONTINENTAL EUROPE—*continued*		*U.S. dollars*
Grain and pulse, unprepared—		
Barley—bagged	Ton weight	18.810
Wheat—		
Bagged	Ton weight	18.470
Bulk	Ton weight	15.734
Oats—bagged	Ton weight	20.172
Rice (paddy), unhusked	Ton weight	28.45
Grain and pulse, prepared—		
Flour, wheaten	Ton weight	24.93
Rice (clean), husked	Ton weight	25.53
Jams	Ton measurement	26.99
Wine	Ton measurement	32.46
Hides and skins—		
Calf	Ton weight	51.31
Cattle	Ton weight	154.91
Sheep, dumped	100 lb	3.39
Other	Ton weight	154.91
Pearlshell	Ton measurement	34.05
Trochus and green snail shell, bags or cases	Ton weight	51.19
Wool—		
Greasy, dumped	100 lb	4.73
Scoured and washed, dumped	100 lb	5.93
Tops	100 lb	5.65
Apparel and attire, effects	Ton weight or measurement	53.38
Oils—		
Eucalyptus	Ton measurement	34.05
Whale	Ton weight	38.54
Stearine	Ton weight	38.54
Tallow, unrefined, in drums	Ton weight	38.54
Zinc—		
Ex Risdon	Ton weight	20.67
Other	Ton weight	16.41
Copper	Ton weight	16.66
Lead	Ton weight	16.66
Steel billets—		
Up to 20 feet long	Ton weight	21.16
Over 20 feet and up to 30 feet long	Ton weight	22.74
Leather (in bales)	Ton weight	75.02
Timber, sawn undressed, up to 30 feet long (shipment of less than 50 tons)	100 super feet	6.32
Toilet paper	Ton measurement	36.36
Casein	Ton weight	44.62
Fertilisers	Ton measurement	43.53
Soap	Ton measurement	36.72
Gold and silver specie	*Ad valorem*	0.75%
UNITED STATES OF AMERICA—ATLANTIC AND GULF PORTS—		
Beef, preserved by cold process—		
Quarters, etc.	100 lb	5.12
Cartons	100 lb (net)	4.57
Casein	Ton weight	51.70
Fish, preserved by cold process—		
Loose	Ton weight	90.80
Cartons	100 lb (net)	4.95
Lead, ores and concentrates	Ton weight	33.00
Mutton, preserved by cold process—		
Carcases	100 lb	5.50
Cuts in cartons	100 lb	4.57
Pipes and tubes of iron and steel	Ton weight or measurement	36.30
Wool—		
Greasy	100 lb	5.80
Scoured, etc.	100 lb	6.95
General cargo	Ton weight or measurement	55.00

(*a*) Excludes rates for commodities shipped in chartered vessels and bulkships.

OVERSEAS SHIPPING FREIGHT RATES FOR LINER SERVICES: AUSTRALIA TO VARIOUS COUNTRIES, 31 DECEMBER 1968(a)—*continued*

Country and commodity	*Unit for which freight rate is quoted*	*Freight rate quoted*
UNITED STATES OF AMERICA—WEST COAST, HAWAII and CANADIAN WEST COAST PORTS—		*U.S. dollars*
Meats—		
Beef, preserved by cold process (cartons)	100 lb (net)	4.57
Lamb and mutton preserved by cold process (cartons)	100 lb (net)	4.57
Dried fruit	Ton measurement	37.00
Wine	Ton measurement	51.10
Wool—		
Greasy	100 lb	5.80
Tops	Ton measurement	42.70
Mineral sand (bags or drums)	Ton weight	28.60
Iron and steel—		
Plates and sheet	Ton weight	34.50
Wire in coils	Ton weight	30.30
Casein	Ton weight	51.70
Copper bars (ex-Townsville)	Ton weight	21.00
Lead ingots (bundles) (ex-Townsville)	Ton weight	21.00
General cargo	Ton weight or measurement	55.00

(a) Excludes rates for commodities shipped in chartered vessels and bulkships.

Interstate rates per ton weight or measurement for general cargo at 31 December 1968 (expressed in Australian dollars) were: Sydney-Melbourne, $16.20; Sydney-Brisbane, $20.00; Sydney-Adelaide, $21.40; Sydney-Fremantle, $31.20; Sydney-Hobart, $17.35; Sydney-Darwin, $25.85.

Shipping casualties

Courts of Marine Inquiry are constituted by a magistrate assisted by skilled assessors, and, when necessary, are held at the principal port in each State and at Launceston (Tasmania). Such courts have power to deal with the certificates of officers who are found at fault. Particulars of shipping losses and casualties reported on or near the coast during each of the years 1963–64 to 1967–68 are shown in the table below.

SHIPPING CASUALTIES TO OVERSEAS AND INTERSTATE STEAM AND MOTOR VESSELS(a) AUSTRALIA, 1963-64 TO 1967-68

	Shipping losses			*Other shipping casualties*			*Total shipping casualties*		
Year	*Vessels*	*Net tons*	*Lives lost*	*Vessels*	*Net tons*	*Lives lost*	*Vessels*	*Net tons*	*Lives lost*
1963–64	..	..	..	109	362,798	..	109	362,798	..
1964–65	..	..	..	87	315,762	..	87	315,762	..
1965–66	1	287	13	87	375,161	..	88	375,448	13
1966–67	..	..	..	104	545,927	..	104	545,927	..
1967–68	..	..	..	100	416,332	..	100	416,332	..

(a) Vessels over 50 net tons.

Lighthouses; distances by sea; depth of water and tides at main ports; ferry passenger services

A list of the principal lighthouses on the coast of Australia, giving details of the location, number, colour, character, period, candle-power and visibility of each light so far as particulars are available, will be found in *Transport and Communication*, Bulletin No. 46.

The distances by sea between principal ports of Australia and some important ports in other countries which trade with Australia were published in Year Book No. 48, page 525.

A table showing the depths of water available and tides at principal ports of Australia is published in the annual bulletin, *Transport and Communication*. For some major ports information is given in the chapter Local Government.

RAILWAYS

Government railways

Government railways in Australia operate in all States and Territories and provide an important means of transportation. In 1967–68 a total of 71.1 million tons of freight were carried, an increase of 77.9 per cent over the 40.0 million tons carried in 1947–48. However, in the same twenty-year period the number of passengers carried (mostly within the suburban areas of Sydney and Melbourne) declined by 11.4 per cent from 510.8 millions in 1947–48 to 452.8 millions in 1967–68. The number of train miles run during 1967–68 (94.5 million) was only 7.7 per cent greater than in 1947–48, which is an indication of the trend towards heavier train loads with the more powerful motive power now available. Since the introduction of the first mainline diesel-electric locomotives in 1950 their numbers have increased greatly until at 30 June 1968 there were 1,096 throughout Australia. Diesel-electric locomotives during 1967–68 hauled 54 million train-miles, while steam locomotives hauled only 7 million train-miles.

Railway development

The first steam-operated railway in Australia ran between Melbourne and Port Melbourne, a distance of two miles, and was opened on 12 September 1854. It was owned and operated by the Melbourne and Hobson's Bay Railway. Within a short time privately-owned railways opened in other States, but owing to the small volume of traffic available they were soon in financial difficulties and all were taken over by the respective State Governments. Under the policy of Government ownership and control the railway networks expanded until at 30 June 1941 there were 27,234 route-miles open for traffic in Australia. This was the greatest mileage ever recorded. Since the 1939–45 War many uneconomic branch lines have been closed. From 1 July 1948 to 30 June 1968, 2,940 miles have been closed, the greatest lengths being in Western Australia (997 miles), Queensland (836 miles), and Victoria (548 miles). During this same period 893 miles of new railway were added to the networks. The following table sets out the route-miles of government railways in each State and Territory at various dates since 1855.

GOVERNMENT RAILWAYS: ROUTE-MILEAGE OPEN, STATES AND TERRITORIES 1855 TO 1968

(Miles)

30 June—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1855(*a*) .	14	2	..	7	..	..	..	..	23
1861(*a*) .	73	114	..	56	..	..	..	..	243
1871(*a*) .	358	276	218	133	..	45	..	..	1,030
1881(*a*) .	996	1,247	800	832	92	45	..	..	4,012
1891 . .	2,182	2,763	2,195	1,666	198	351	145	..	9,500
1901 . .	2,846	3,237	2,801	1,736	1,355	457	145	..	12,577
1911 . .	3,762	3,523	3,868	1,935	2,376	470	145	..	16,079
1921 . .	5,043	4,267	5,752	3,408	3,992	630	199	5	23,296
1931 . .	6,247	4,514	6,529	3,725	4,634	665	317	5	26,636
1941 . .	6,368	4,518	6,567	3,809	4,835	642	490	5	27,234
1951 . .	6,354	4,445	6,560	3,805	4,682	613	490	5	26,954
1961 . .	6,303	4,050	6,324	3,836	4,577	517	490	5	26,102
1965 . .	6,259	4,007	5,785	3,800	4,187	500	490	5	25,033
1966 . .	6,259	3,984	5,785	3,781	4,201	500	490	5	25,005
1967 . .	6,259	4,027	5,730	3,779	4,269	500	490	5	25,059
1968 . .	6,265	4,012	5,825	3,780	4,269	500	490	5	25,146

(*a*) At 31 December.

One feature of the Australian government railways is the variety of gauges to which they are built. There are three principal gauges, 'broad' (5ft 3in), 'standard' (4ft 8½in), and 'narrow' (3ft 6in). Extensive route-mileages of 3ft 6in gauge railway were built in areas where traffic volumes were initially known to be small and where it was imperative to minimise the costs of construction. The following table shows the mileages open in each State and Territory at 30 June 1968 according to gauge.

GOVERNMENT RAILWAYS: ROUTE-MILEAGE OPEN, BY GAUGE STATES AND TERRITORIES, 30 JUNE 1968

(Miles)

Gauge	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
5ft 3in	(*a*)204	(*b*)3,801	..	1,652	..	..	..	..	5,657
4ft 8½in	6,061	202	69	(*c*)871	(*d*)767	..	..	(*e*)5	7,975
3ft 6in	..	..	5,726	(*f*)1,257	(*g*)3,502	500	(*h*)490	..	11,475
2ft 6in	..	9	..	..	..	..	..	..	9
2ft 0in	..	..	30	..	..	..	..	..	30
Total	6,265	4,012	5,825	3,780	4,269	500	490	5	25,146
Per 1,000 of population	1.43	1.21	3.37	3.40	4.69	1.31	7.84	0.04	2.09
Per 1,000 square miles	20.25	45.65	8.73	9.95	4.37	18.95	0.94	5.32	8.47

(*a*) Portion of Victorian Railway system. (*b*) Excludes 202 route-miles of 5ft 3in gauge which almost parallels the 4ft 8½in gauge line between Melbourne and the Murray River. (*c*) Comprises 654 miles of Trans-Australian and 217 miles of the Central Australia Railway systems. (*d*) Includes 454 miles of the Trans-Australian Railway system. (*e*) Australian Capital Territory Railway system. (*f*) Includes 428 miles of the Central Australia Railway system. (*g*) Excludes 192 miles of 3ft 6in gauge line which parallels the 4ft 8½in gauge line and 66 miles of 3ft 6in/4ft 8½in dual gauge line which are included in the 4ft 8½in gauge line. (*h*) Comprises 173 miles of the Central Australia and 317 miles of the North Australia Railway systems.

Government railway systems

There are six separate State Government railway systems and one Commonwealth railway system. As the Commonwealth system includes mileages in South Australia and Western Australia, and the Victorian system extends into New South Wales, the system route-mileages shown in the following table do not represent mileages within each State and Territory. These are shown in the previous table. The route-mileage of each system open for traffic, according to gauge, at 30 June 1968 is shown in the following table.

GOVERNMENT RAILWAYS: ROUTE-MILEAGE OPEN, BY GAUGE AND SYSTEM 30 JUNE 1968

(Miles)

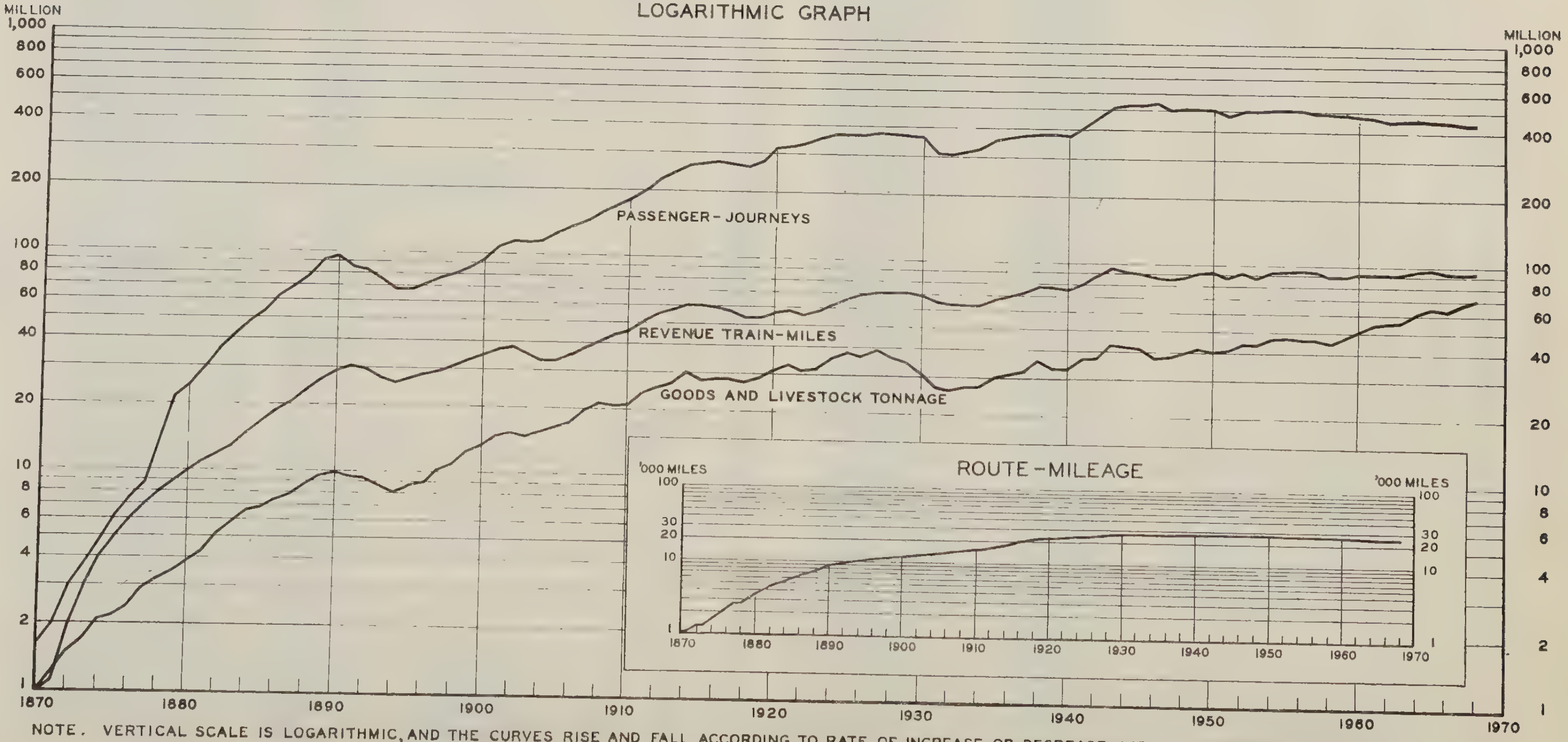
	Gauge					
System	*5ft 3in*	*4ft 8½in*	*3ft 6in*	*2ft 6in*	*2ft 0in*	*Total*
New South Wales	..	(*a*)6,061	..	..	..	6,061
Victoria	(*b*)4,005	202	..	9	..	4,216
Queensland	..	69	5,726	..	30	5,825
South Australia	1,652	..	829	..	..	2,481
Western Australia	..	313	(*c*)3,502	..	..	3,815
Tasmania	..	..	500	..	..	500
Commonwealth	..	1,330	918	..	..	2,248
Australia	5,657	7,975	11,475	9	30	25,146

(*a*) Includes 268 route-miles which are electrified. (*b*) Excludes 202 route-miles of 5ft 3in gauge line which almost parallels the 4ft 8½in gauge line between Melbourne and the Murray River. Includes 263 route-miles which are electrified. (*c*) Excludes 192 miles of 3ft 6in gauge line which parallels the 4ft 8½in gauge line and 66 miles of 3ft 6in/4ft 8½in dual gauge line which are included in the 4ft 8½in gauge line.

The New South Wales system is based on Sydney and extends throughout the State. The Victorian system based on Melbourne radiates throughout the State, extending into areas of southern New South Wales. The Queensland system extends along the coast from Brisbane to Cairns in the north, while branch lines extend inland from Brisbane and the larger coastal cities of Rockhampton and Townsville. The main South Australian system is in the south-east of the State, but an isolated narrow-gauge system operates in the Eyre Peninsula area. The railway system in Western Australia is established in the south-western section of the State, but extends north to Meekatharra and east to Kalgoorlie and Esperance. In Tasmania the main line connects Hobart and Launceston, and there are branch lines along the northern coast.

GOVERNMENT RAILWAYS: AUSTRALIA, 1870 TO 1967-68

ROUTE MILEAGE AND TRAFFIC



NOTE. VERTICAL SCALE IS LOGARITHMIC, AND THE CURVES RISE AND FALL ACCORDING TO RATE OF INCREASE OR DECREASE. ACTUAL NUMBERS ARE INDICATED BY SCALE.

PLATE 30

The Commonwealth Railways comprises four separate railways. The Trans-Australian Railway, extending from Port Pirie to Kalgoorlie, is of 4ft 8½in gauge, as is that part of the Central Australia Railway from Port Augusta (Sterling North) to Maree. A further extension of this railway from Maree to Alice Springs is of 3ft 6in gauge, as is the North Australia Railway from Darwin to Birdum. The Australian Capital Territory Railway from Queanbeyan to Canberra is of 4ft 8½in gauge. In this chapter particulars of the four Commonwealth railways are combined; however, particulars for each railway are shown separately in the annual bulletin *Transport and Communication.*

A graph showing the route-mileages and traffic of all Government railways from 1870 to 1968 appears on plate 30 opposite.

Standardisation of railway gauges

A number of specific programmes for the standardisation of railways in Australia have been arranged on the basis of mutual agreement and collaboration between the Commonwealth and State Governments with the ratification of the Parliaments concerned. Under various Commonwealth-State Standardisation Agreements approximately 1,062 route-miles of standard (4ft 8½in) gauge track have been completed since 1956, and a further 49 route-miles are expected to be completed during 1970. A special article setting out the history of rail standardisation in Australia is given in Year Book No. 53, pages 440–5.

The first step towards standardisation of existing broken gauge lines between capital cities was effected in 1930 with the construction of a 4ft 8½in gauge line from Kyogle (New South Wales) to Brisbane. In 1957 a new standard gauge railway between Port Augusta and Maree was completed. This line replaced the former narrow-gauge line and followed a new alignment between Port Augusta and Brachina (87 miles) whence it followed the old route to Maree. The narrow-gauge line from Port Augusta to Hawker was retained and that from Hawker to Brachina was demolished. In 1962 the opening of a standard gauge line between Albury and Melbourne completed the standard gauge link between Melbourne and Brisbane. Bogie exchange facilities have been installed at Melbourne and Port Pirie (South Australia) to eliminate much of the physical transfer of goods between the rolling stock of the standard gauge and that of the 5ft 3in gauge systems serving Victoria and a large part of South Australia.

Standardisation projects (4ft 8½in) gauge now proceeding are designed to link Sydney with Perth and Fremantle through Broken Hill, Port Pirie, and Kalgoorlie. At present, lines of this gauge exist between Sydney and Broken Hill (New South Wales Government Railways) and between Port Pirie and Kalgoorlie (Commonwealth Railways). The standard gauge line between Fremantle and Kalgoorlie commenced operations for transport of interstate goods during November 1968. Conversion of the 3ft 6in gauge to standard gauge between Port Pirie and Cockburn (218 miles) is proceeding and is expected to be completed in the first half of 1969. Construction of the new standard gauge line between Cockburn and Broken Hill, to replace the existing Silverton Tramway Company's line between those centres, will commence shortly and completion is expected by the end of 1969, when there will be a direct standard gauge link between Sydney and Perth. The overall length of the Sydney–Perth railway, to be opened early in 1970, is 2,442 miles. The total cost of the new work, including new rolling stock and substantial new facilities, is expected to be about $210 million.

Private railways

In addition to the Government railway systems there are a number of important private railways in Australia. Most of these were constructed for the prime purpose of hauling minerals, although some of them also carry passengers and general traffic. Private railways hauling iron ore operate from Iron Knob and Iron Baron to Whyalla (South Australia), from Mount Tom Price to Dampier (Western Australia), and from Mount Goldsworthy to Finucane Island, near Port Hedland. Lines from Yallourn to Morwell (Victoria) and from Maitland to Cessnock (New South Wales) carry coal, while lines from Broken Hill to Cockburn on the South Australian border (New South Wales) and from Rosebery to Burnie (Tasmania) carry base metal concentrates. There are numerous other short lengths of private railways in Australia. Many of these are narrow-gauge lines, mainly on the Queensland coast, which carry sugar cane to the mills during the crushing season.

Operations of Government railway systems

Particulars of train-mileages, passenger-journeys, passenger-miles, freight tons carried, and freight ton-miles included in this section refer only to operations for which revenue is received.

Summary of operations

GOVERNMENT RAILWAYS: SUMMARY OF OPERATIONS, SYSTEMS, 1967-68

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Cwlth*	*Aust.*
Train-mileage ('000)(*a*)—								
Suburban passenger	10,669	8,420	1,885	2,026	1,286	112	..	24,398
Country passenger	10,280	4,833	3,679	1,888	930	211	737	22,558
Goods(*b*) . .	17,585	6,633	11,267	2,504	6,156	923	2,469	47,537
Total . .	*38,535*	*19,885*	*16,831*	*6,418*	*8,372*	*1,247*	*3,206*	*94,494*
Passenger-journeys ('000)(*c*)—								
Suburban . .	238,061	141,733	24,065	14,447	9,628	870	..	428,804
Country(*d*) . .	15,253	4,535	2,526	795	342	217	347	24,015
Total . .	*253,313*	*146,268*	*26,591*	*15,242*	*9,970*	*1,087*	*347*	*452,818*
Passenger-miles ('000)(*e*)—								
Suburban . .	n.a.	1,250,058	n.a.	117,764	n.a.	5,665	..	n.a.
Country . .	n.a.	375,783	n.a.	89,629	68,065	11,427	119,772	n.a.
Total . .	*n.a.*	*1,625,840*	*n.a.*	*207,393*	*n.a.*	*17,092*	*119,772*	*n.a.*
Freight—								
Tons carried('000)(*d*)	30,745	11,116	11,133	4,368	8,910	1,162	3,627	71,061
Net ton-miles (million)(*f*) . .	4,844.1	1,776.2	2,201.3	680.9	1,571.7	117.2	1,072.3	12,263.7

(*a*) One train (i.e. a complete unit of locomotive and vehicles, electric train set, or rail motor) travelling one mile for revenue purposes. (*b*) Includes mixed train-mileage. (*c*) Based on ticket sales making allowances for periodical tickets. Tickets sold at concession rates are counted as full journeys. (*d*) Inter-system traffic is included in the total for each system (including each Commonwealth railway) over which it passes. (*e*) One passenger travelling one mile. (*f*) One ton carried one mile.

Rolling stock

GOVERNMENT RAILWAYS: ROLLING STOCK INCLUDED IN CAPITAL ACCOUNT

	Locomotives							
System and date	*Steam*	*Diesel-electric*	*Electric*	*Other (a)*	*Total*	*Coaching stock (b)*	*Goods stock*	*Service stock*
30 June 1968—								
New South Wales .	262	336	41	31	670	(*c*)3,474	(*c*)19,835	2,275
Victoria . . .	95	220	35	75	425	(*c*)2,423	(*c*)20,719	(*c*)1,625
Queensland . .	386	262	..	12	660	1,327	21,256	1,886
South Australia .	98	126	..	..	224	(*c*)539	7,524	(*c*)488
Western Australia .	215	133	..	20	368	496	11,944	981
Tasmania . .	20	37	..	20	77	121	2,333	184
Commonwealth .	1	72	..	10	83	121	1,925	464
Australia . .	**1,077**	**1,186**	**76**	**168**	**2,507**	**(*d*)8,619**	**(*d*)85,552**	**(*d*)7,904**
30 June—								
1967	1,337	1,054	76	156	2,623	8,727	86,887	7,920
1966	1,591	925	76	150	2,742	8,748	88,205	7,987
1965	1,782	821	76	147	2,826	8,777	88,781	8,144
1964	1,981	694	76	140	2,891	8,829	88,929	7,944
1963	2,215	608	76	132	3,031	8,969	90,020	7,960

(*a*) Includes non-passenger-carrying diesel power vans. (*b*) Includes all brake vans and non-powered electric train stock. (*c*) Excludes stock jointly-owned with other systems. (*d*) Includes jointly-owned stock.

Train-mileage

GOVERNMENT RAILWAYS: TRAIN-MILEAGE, BY TYPE OF SERVICE, SYSTEMS 1963-64 TO 1967-68

('000 miles)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Cwlth*	*Aust.*
SUBURBAN PASSENGER								
1963–64	10,939	8,369	1,742	1,967	1,368	137	..	24,522
1964–65	10,888	8,480	1,778	1,951	1,375	136	..	24,608
1965–66	10,788	8,458	1,820	1,950	1,328	135	..	24,479
1966–67	10,782	8,504	1,864	2,028	1,280	125	..	24,583
1967–68	10,669	8,420	1,885	2,026	1,286	112	..	24,398
COUNTRY PASSENGER								
1963–64	10,308	4,835	4,416	1,932	982	246	814	23,533
1964–65	10,263	4,837	3,914	1,922	984	226	818	22,964
1965–66	10,208	4,738	3,901	1,900	966	230	811	22,754
1966–67	10,280	4,798	3,823	1,897	941	221	768	22,728
1967–68	10,280	4,833	3,679	1,888	930	211	737	22,558
GOODS(*a*)								
1963–64	17,831	6,909	13,003	2,767	5,156	939	1,854	48,459
1964–65	19,043	7,172	11,913	2,709	5,203	910	2,096	49,046
1965–66	16,699	6,949	11,918	2,642	5,749	918	2,144	47,019
1966–67	16,576	6,733	11,188	2,659	6,094	929	2,190	46,369
1967–68	17,585	6,633	11,267	2,504	6,156	923	2,469	47,537
TOTAL								
1963–64	39,078	20,113	19,161	6,666	7,506	1,322	2,668	96,514
1964–65	40,194	20,489	17,605	6,582	7,562	1,272	2,914	96,618
1965–66	37,694	20,145	17,640	6,492	8,043	1,283	2,955	94,252
1966–67	37,638	20,035	16,876	6,584	8,316	1,275	2,958	93,682
1967–68	38,535	19,885	16,831	6,418	8,372	1,247	3,206	94,494

(*a*) Includes mixed train-miles.

GOVERNMENT RAILWAYS: TRAIN-MILEAGE, BY TYPE OF MOTIVE POWER, SYSTEMS 1963-64 TO 1967-68

('000 miles)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Cwlth*	*Aust.*
HAULED BY DIESEL–ELECTRIC LOCOMOTIVES								
1963–64	13,578	6,831	8,586	2,984	3,124	1,162	2,576	38,841
1964–65	15,490	7,426	9,474	3,047	3,443	1,100	2,815	42,795
1965–66	15,495	7,928	10,752	3,108	4,062	1,093	2,857	45,295
1966–67	17,108	8,367	12,080	3,188	4,420	1,108	2,863	49,134
1967–68	19,550	8,690	13,336	3,048	4,712	1,104	3,109	53,549
HAULED BY STEAM LOCOMOTIVES								
1963–64	9,320	2,074	8,139	429	3,014	12	5	22,993
1964–65	8,318	1,800	6,011	290	2,744	12	7	19,182
1965–66	6,026	1,074	4,721	162	2,665	4	5	14,657
1966–67	4,167	480	2,692	89	2,643	2	5	10,078
1967–68	2,521	145	1,461	67	2,380	3	6	6,583
HAULED BY ELECTRIC AND OTHER LOCOMOTIVES								
1963–64	2,394	1,139	80	..	..	..	..	3,613
1964–65	2,459	1,120	72	..	..	..	..	3,651
1965–66	2,158	1,092	71	..	..	21	..	3,342
1966–67	2,214	1,069	73	..	..	19	..	3,375
1967–68	2,261	999	63	..	..	19	..	3,342
POWERED COACHING STOCK								
1963–64	13,786	10,069	2,356	3,253	1,368	148	87	31,067
1964–65	13,927	10,143	2,048	3,245	1,375	160	92	30,990
1965–66	14,016	10,051	2,097	3,222	1,316	166	93	30,961
1966–67	14,149	10,118	2,030	3,307	1,254	146	90	31,094
1967–68	14,203	10,052	1,971	3,303	1,281	121	90	31,021

Passenger traffic

Passenger-journeys

GOVERNMENT RAILWAYS: PASSENGER-JOURNEYS(*a*), SYSTEMS, 1963-64 TO 1967-68
('000)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Cwlth*	*Aust.*
SUBURBAN								
1963–64	(*b*)227,319	148,314	22,512	14,332	10,298	1,229	..	(*b*)424,004
1964–65	(*b*)225,420	144,846	22,254	14,326	9,911	1,135	..	(*b*)417,892
1965–66	242,216	144,332	23,227	14,671	9,748	1,097	..	435,291
1966–67	239,986	141,593	23,703	14,608	9,468	973	..	430,331
1967–68	238,061	141,733	24,065	14,447	9,628	870	..	428,804
COUNTRY(*c*)								
1963–64	(*b*)13,358	5,082	3,391	895	516	197	338	(*b*)23,777
1964–65	(*b*)13,312	4,907	2,961	870	484	205	347	(*b*)23,086
1965–66	15,352	4,793	2,752	840	419	207	342	24,705
1966–67	15,298	4,674	2,668	824	343	224	371	24,402
1967–68	15,253	4,535	2,526	795	342	217	347	24,015
TOTAL								
1963–64	263,796	153,396	25,903	15,227	10,814	1,426	338	470,900
1964–65	261,681	149,753	25,215	15,196	10,395	1,340	347	463,927
1965–66	257,568	149,125	25,979	15,511	10,168	1,304	342	459,997
1966–67	255,284	146,268	26,372	15,432	9,811	1,197	371	454,735
1967–68	253,313	146,268	26,591	15,242	9,970	1,087	347	452,818

(*a*) Based on ticket sales making allowance for periodical tickets. Tickets sold at concession rates are counted as full journeys. (*b*) Excludes some passenger-journeys in New South Wales for which a dissection between suburban and country is not available. (*c*) Inter-system traffic is included in the total for each system (including each Commonwealth railway) over which it passes.

Passenger-miles

GOVERNMENT RAILWAYS: PASSENGER-MILES(*a*), SYSTEMS, 1963-64 TO 1967-68
('000)

Year	*Vic.*	*S.A.*	*W.A.*	*Tas.*	*Cwlth*
SUBURBAN					
1963–64	1,315,105	120,110	71,468	7,664	..
1964–65	1,279,320	119,232	69,824	7,208	..
1965–66	1,273,380	122,720	67,826	7,062	..
1966–67	1,256,759	121,549	n.a.	6,306	..
1967–68	1,250,058	117,764	n.a.	5,665	..
COUNTRY					
1963–64	410,830	96,877	66,753	11,380	107,005
1964–65	403,640	96,835	68,064	12,355	120,977
1965–66	396,226	95,410	66,968	11,132	121,351
1966–67	393,121	96,331	67,897	14,843	129,764
1967–68	375,783	89,629	68,065	11,427	119,772
TOTAL					
1963–64	1,725,935	216,987	138,221	19,044	107,005
1964–65	1,682,960	216,067	137,888	19,563	120,977
1965–66	1,669,606	218,130	134,794	18,194	121,351
1966–67	1,649,880	217,880	n.a.	21,149	129,764
1967–68	1,625,840	207,393	n.a.	17,092	119,772

(*a*) Particulars for New South Wales and Queensland, and in consequence the totals for Australia, are not available.

Freight traffic

Freight carried

GOVERNMENT RAILWAYS: FREIGHT CARRIED(*a*), SYSTEMS

('000 tons)

Commodity and year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Cwlth*	*Aust.*
1967–68—								
Wheat . . .	3,105	1,231	736	415	2,277	..	1	7,765
Other agricultural produce . .	935	1,144	2,929	222	361	48	39	5,678
Coal, coke and briquettes . .	14,337	1,911	3,784	7	359	69	2,093	22,560
Other minerals(*b*) .	2,785	153	811	1,467	3,478	23	483	9,200
Wool . . .	217	128	44	18	117	3	2	529
Fertilisers and manure	502	877	100	345	703	130	5	2,662
Cement . . .	967	766	142	128	(*c*)	239	104	2,346
Timber . . .	278	363	132	51	393	312	20	1,549
Livestock . .	369	335	574	92	88	20	71	1,549
All other commodities	7,250	4,207	1,882	1,624	(*d*)1,134	318	808	17,223
Total . .	**30,745**	**11,116**	**11,133**	**4,368**	**8,910**	**1,162**	**3,627**	**71,061**
1966–67 . . .	29,275	12,075	10,185	4,876	7,873	1,079	3,121	68,484
1965–66 . . .	27,004	12,156	10,049	4,789	6,384	1,072	2,976	64,430
1964–65 . . .	27,889	12,596	10,031	5,089	5,229	1,091	2,919	64,844
1963–64 . . .	25,814	12,132	9,796	5,179	5,187	1,155	2,478	61,741
1962–63 . . .	23,641	10,841	8,736	4,503	4,793	1,165	2,230	55,909

(*a*) Inter-system traffic is included in the total for each system (including each Commonwealth railway) over which it passes. (*b*) Includes sand and gravel. (*c*) Cement included with 'All other commodities'. (*d*) Includes cement.

Freight net ton-miles

GOVERNMENT RAILWAYS: FREIGHT NET TON-MILES, SYSTEMS

(Million)

Commodity and year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Cwlth*	*Aust.*
1967–68—								
Wheat . . .	915.8	205.5	(*a*)	37.8	403.2	..	(*b*)	n.a.
Other agricultural produce . .	373.4	214.8	(*a*)	32.2	67.7	4.4	33.3	n.a.
Coal, coke and briquettes . .	537.9	167.2	(*a*)	1.4	22.1	8.3	325.3	n.a.
Other minerals(*c*) .	338.0	15.8	(*a*)	206.1	535.6	1.1	80.5	n.a.
Wool . . .	54.4	16.9	(*a*)	3.3	28.5	0.3	1.0	n.a.
Fertilisers and manure	154.4	153.2	(*a*)	63.5	117.6	21.7	5.2	n.a.
Cement . . .	154.4	50.7	(*a*)	15.0	(*d*)	14.1	8.4	n.a.
Timber . . .	96.6	65.8	(*a*)	10.4	85.1	17.0	18.7	n.a.
Livestock . .	130.1	63.9	149.5	14.8	14.7	2.9	31.1	407.0
All other commodities	2,089.2	822.5	2,051.8	296.4	(*e*)297.3	47.3	568.7	6,111.7
Total . .	**4,844.1**	**1,776.2**	**2,201.3**	**680.9**	**1,571.7**	**117.2**	**1,072.3**	**12,263.7**
1966–67 . . .	4,554.8	1,937.4	2,003.6	739.4	1,244.1	118.2	919.2	11,516.7
1965–66 . . .	4,281.8	1,989.5	2,002.0	749.3	1,020.8	113.4	881.4	11,038.2
1964–65 . . .	4,706.0	2,028.2	1,800.9	765.4	842.1	116.6	885.8	11,145.0
1963–64 . . .	4,282.1	1,905.6	1,887.1	754.1	813.3	113.9	744.4	10,500.5
1962–63 . . .	3,743.3	1,693.2	1,599.7	679.4	762.3	111.8	663.6	9,253.3

(*a*) Not available separately, included with 'All other commodities'. (*b*) Less than 50,000 net ton-miles. (*c*) Includes sand and gravel. (*d*) Cement included with 'All other commodities'. (*e*) Includes cement.

Finance

GOVERNMENT RAILWAYS: GROSS EARNINGS(*a*), SYSTEMS, 1967-68

($'000)

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Cwlth*	*Aust.*
Coaching—								
Suburban passenger	29,110	22,511	2,460	1,905	1,214	71	..	57,271
Country passenger	15,859	7,764	4,260	1,730	1,604	142	2,505	33,864
Other	6,653	4,178	3,060	959	1,376	187	571	16,984
Total, coaching	*(b)(c)52,938*	*34,453*	*9,780*	*4,594*	*4,194*	*400*	*3,075*	*(d)109,434*
Freight (goods and livestock)—								
Wheat	(*e*)	6,834	6,573	1,623	12,045	..	1	n.a.
Other agricultural produce	(*e*)	6,284	13,109	931	2,220	258	346	n.a.
Coal, coke and briquettes	(*e*)	5,965	13,387	27	1,129	308	2,403	n.a.
Other minerals(*f*)	(*e*)	432	6,787	7,157	7,247	60	1,247	n.a.
Wool	(*e*)	1,133	1,639	149	1,687	34	38	n.a.
Fertilisers and manure	(*e*)	3,308	810	1,068	3,434	904	37	n.a.
Cement	(*e*)	2,461	1,375	400	(*g*)	789	193	n.a.
Timber	(*e*)	2,457	1,590	253	2,834	841	196	n.a.
Livestock	4,314	1,703	7,523	708	674	138	523	15,583
All other commodities	155,398	27,224	28,519	8,614	(*h*)14,386	2,620	12,657	249,417
Total, freight	*(b)159,712*	*57,801*	*81,313*	*20,929*	*45,656*	*5,952*	*17,642*	*389,005*
Miscellaneous	(*b*)12,316	7,047	2,925	2,523	1,778	234	1,516	28,339
Grand total	**(*b*)224,966**	**99,301**	**94,018**	**28,046**	**51,628**	**6,587**	**22,233**	**526,779**

(*a*) Excludes Government grants. (*b*) Includes State Co-ordination Tax Contribution. (*c*) Includes earnings which cannot be allocated among suburban, country or other coaching earnings. (*d*) *See* footnote (*c*). (*e*) Not available separately, included with 'All other commodities'. (*f*) Includes sand and gravel. (*g*) Cement included with 'All other commodities'. (*h*) Includes cement.

GOVERNMENT RAILWAYS: WORKING EXPENSES, SYSTEMS, 1967-68

($'000)

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.(a)*	*Cwlth*	*Aust.*
Maintenance of way and works	33,923	20,695	26,108	(*a*)8,228	(*a*)12,136	2,216	6,628	109,934
Motive power(*b*)	64,761	27,484	32,977	(*a*)12,066	(*a*)18,752	3,042	5,616	164,698
Traffic	49,386	31,191	22,398	(*a*)9,597	11,739	2,384	3,628	130,323
Other charges	46,869	25,714	5,950	4,719	5,118	1,110	(*a*)5,436	94,916
Total	**194,939**	**105,084**	**87,435**	**(*a*)34,610**	**(*a*)47,745**	**8,751**	**(*a*)21,308**	**499,872**

(*a*) Includes provision of reserves for depreciation. (*b*) Includes maintenance of rolling stock.

GOVERNMENT RAILWAYS: GROSS EARNINGS, WORKING EXPENSES, AND NET EARNINGS SYSTEMS, 1963-64 TO 1967-68

($'000)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Cwlth*	*Aust.*
GROSS EARNINGS								
1963–64	202,488	92,778	84,260	29,496	34,602	5,668	15,194	464,486
1964–65	213,258	100,225	81,321	29,764	35,715	5,581	17,419	483,283
1965–66	195,336	99,519	84,178	28,947	42,571	5,985	18,091	474,627
1966–67	213,335	104,477	87,864	30,220	48,008	6,588	19,428	509,920
1967–68	224,966	99,301	94,018	28,046	51,628	6,587	22,233	526,779
WORKING EXPENSES								
				(*a*)	(*a*)	(*a*)	(*a*)	
1963–64	177,416	91,512	78,288	30,910	35,802	6,894	14,218	435,040
1964–65	187,240	99,337	80,513	31,713	36,529	7,219	15,967	458,518
1965–66	179,792	101,006	84,126	32,388	39,730	7,547	17,316	461,905
1966–67	184,992	103,423	84,295	33,962	44,513	8,325	19,411	478,921
1967–68	194,939	105,084	87,435	34,610	47,745	8,751	21,308	499,872
NET EARNINGS(*b*)								
1963–64	25,072	1,266	5,972	−1,414	−1,200	−1,226	976	29,446
1964–65	26,018	888	808	−1,949	−814	−1,638	1,452	24,765
1965–66	15,544	−1,486	52	−3,441	2,841	−1,561	775	12,724
1966–67	28,343	1,054	3,569	−3,742	3,496	−1,737	17	31,000
1967–68	30,027	−5,784	6,583	−6,564	3,883	−2,164	925	26,906

(*a*) Includes provision of reserves for depreciation. (*b*) Excess of gross earnings over working expenses as shown in this table.

GOVERNMENT RAILWAYS: SURPLUS OR DEFICIT, SYSTEMS, 30 JUNE 1968

($'000)

System	*Net earnings —excess of gross earnings over working expenses*	Plus *grants and other earnings payable to railways*				Less *other expenses charged to railways*					*Surplus (+) or deficit (−)*
		State Government grants	*Road motor earnings*	*Other*	*Total*	*Interest and exchange*	*Sinking fund*	*Road motor expenses (a)*	*Other*	*Total*	
New South Wales	30,027	(*b*)3,200	..	..	3,200	26,387	6,078	..	(*c*)752	33,217	10
Victoria	−5,784	(*d*)30	62	..	92	5,496	251	120	..	5,867	−11,557
Queensland	6,583	..	..	..	..	(*e*)17,639	(*f*)79	..	(*g*)1,700	19,418	(*h*)−12,835
South Australia	−6,564	(*i*)10,000	198	..	10,198	5,700	..	214	(*j*)454	6,368	−2,734
Western Australia	3,883	..	1,145	..	1,145	8,767	..	1,060	..	9,827	−4,800
Tasmania	−2,164	..	..	(*k*)36	36	1,068	..	..	..	1,068	−3,196
Commonwealth	925	..	..	..	..	..	..	..	..	..	925
Australia	**26,906**	**13,230**	**1,405**	**36**	**14,671**	**65,057**	**6,408**	**1,394**	**2,906**	**75,765**	**−34,187**

(*a*) Includes interest and exchange. (*b*) Grants to meet losses on country developmental lines, to subsidise payments due from superannuation account. (*c*) Loan management and loan floatation expenses. (*d*) Kerang–Koondrook tramway recoup from Treasury. (*e*) Interest on opened and unopened lines, interest and redemption Mount Isa project fund, and interest on the Queensland 4ft 8½ in gauge system. (*f*) Queensland 4 ft 8½ in gauge system only. (*g*) Demolished assets written off. (*h*) Includes deficit ($700,619) on the Queensland 4 ft 8½ in gauge system. (*i*) Grants towards working expenses and debt charges. (*j*) Interest and repayment under Railway Standardisation and Railway Equipment Agreements. (*k*) Miscellaneous goods revenue from rail-ferry service traffic not carried by rail.

Employment, salaries and wages

GOVERNMENT RAILWAYS: AVERAGE NUMBER OF EMPLOYEES, AND SALARIES AND WAGES PAID, SYSTEMS, 1967-68

	N.S.W.	*Vic.*	*Qld(a)*	*S.A.*	*W.A.*	*Tas.*	*Cwlth*	*Aust.*
Average number of employees—								
Operating staff—								
Salaried . .	9,471	(*b*)5,341	4,132	1,824	2,071	383	478	23,700
Wages . .	35,780	(*b*)22,179	19,793	6,187	9,093	1,866	2,941	97,839
Construction staff—								
Salaried . .	..	(*c*)	..	33	..	34	..	67
Wages . .	..	(*c*)	82	1,233	..	141	..	1,456
Total staff . .	*45,251*	*27,520*	*24,007*	*9,277*	*11,164*	*2,424*	*3,419*	*123,062*
Total salaries and wages paid . ($'000)	156,375	82,626	68,922	27,736	33,231	6,425	11,214	386,527
Average earnings per employee ($) . .	3,103	3,002	2,871	2,990	2,987	2,651	3,280	3,011

(*a*) Excludes Queensland 4 ft 8½ in gauge system. (*b*) Includes construction staff. (*c*) Included with operating staff.

Consumption of coal, oil, and petrol

GOVERNMENT RAILWAYS: VALUE OF COAL, OIL AND PETROL CONSUMED, SYSTEMS 1967-68

($'000)

	N.S.W.(a)	*Vic.*	*Qld(a)*	*S.A.*	*W.A.*	*Tas.*	*Cwlth*	*Aust.*
Coal used—								
In locomotives .	n.a.	150	617	50	838	5	..	n.a.
For other purposes .	n.a.	33	12	27	11	1	..	..
Oil used—								
In diesel engines of locomotives and rail cars	3,004	1,135	2,170	693	724	210	756	8,692
In furnaces of steam locomotives . .	28	85	..	34	16	..	..	163
For lubrication .	529	239	41	n.a.	202	30	129	n.a.
For other purposes .	571	154	310	n.a.	246	18	88	n.a.
Petrol used in rail cars .	..	..	..	(*b*)	11	..	..	11

(*a*) Queensland 4 ft 8½ in gauge system included with New South Wales. (*b*) Less than $500.

TRAMWAY, TROLLEY-BUS, OMNIBUS, AND FERRY SERVICES

Systems in operation

Tramway and trolley-bus. Since 1 April 1947 all systems have been operated by government or municipal authorities. During the year 1967–68, tramway systems were in operation in the following cities: Melbourne, Bendigo, and Ballarat, Victoria; Brisbane, Queensland; and Adelaide, South Australia. Trolley-bus services operated in Brisbane, Queensland; Perth, Western Australia; and Hobart and Launceston, Tasmania. All systems were electric.

In many parts of Australia private lines used for special purposes in connection with the timber, mining, sugar, or other industries are often called tramways, but they are more properly railways, and the traffic on them has nothing in common with that of the street tramways used for the conveyance of passengers, which are dealt with in this section.

Motor omnibus. Services are operated by government or municipal authorities and private operators. Statistics are collected for government and municipal omnibus services located in all State capital cities; Canberra, Australian Capital Territory; Newcastle, New South Wales; Maryborough and Rockhampton, Queensland; Fremantle and the Eastern Goldfields area, Western Australia; Launceston and Burnie, Tasmania; Darwin, Northern Territory; and for country road services operated by the Western Australian Government Railways and the Tasmanian Transport Commission. In Sydney the Government tramway system has been replaced by omnibus services, and in Perth the Metropolitan (Perth) Passenger Transport Trust has replaced privately owned services in the metropolitan area. In Hobart the Government trolley-bus and omnibus services have replaced the Government tramway service. Particulars of motor omnibus services under the control of private operators for the States of New South Wales, Victoria, Queensland, South Australia, and Western Australia are given in previous issues of this Year Book and in the annual bulletin *Transport and Communication.*

Ferry. Ferry passenger services are operated in the following States: New South Wales, at Sydney and Newcastle; Western Australia, on the Swan River at Perth; Tasmania, on the Mersey River at Devonport. Control is exercised by both governmental authorities and private operators. Particulars of the operations of these services are given in previous issues of this Year Book and in the annual bulletin *Transport and Communication.* In Victoria and Queensland the services operated are not extensive. There are no ferry passenger services in South Australia.

Government and municipal tramway, trolley-bus and omnibus services

Because of the development in recent years of the various forms of public road transport under the control of single authorities, and the gradual replacement of tramway services by motor omnibus services, it is not possible to obtain separate statistics for all phases of the activities of each form of transport, particularly financial operations. The two following tables present combined statistics of public tramway, trolley-bus and motor omnibus services with separate details shown for each form of transport where possible.

TRAMWAY, TROLLEY-BUS AND OMNIBUS SERVICES: GOVERNMENT AND MUNICIPAL, STATES AND TERRITORIES, 1967-68

		N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Route-miles at 30 June—										
Tram(*a*)	miles	..	156	59	7	..	..	..	..	222
Trolley-bus	„	..	..	20	..	17	27	..	..	64
Omnibus	„	608	140	358	150	4,657	755	43	83	6,794
Vehicle-miles—										
Tram	'000	..	17,314	5,080	419	..	..	..	..	22,813
Trolley-bus	„	..	..	663	..	602	773	..	..	2,038
Omnibus	„	45,212	7,335	7,451	10,247	20,536	5,534	715	2,327	99,357
Rolling stock at 30 June—										
Tram	number	..	754	224	26	..	..	..	..	1,004
Trolley-bus	„	..	..	36	..	50	52	..	..	138
Omnibus	„	1,521	233	399	325	707	258	19	109	3,571
Passenger-journeys—										
Tram	'000	..	131,112	46,289	1,879	..	..	..	..	179,280
Trolley-bus	„	..	..	4,224	..	2,598	(*b*)	..	..	429,819
Omnibus	„	242,407	25,576	28,305	45,934	51,293	22,144	1,243	6,095	
Gross revenue(*c*)—										
Tram, trolley-bus and omnibus	$'000	27,274	19,306	8,608	6,225	8,016	2,538	210	670	72,847
Working expenses(*d*)—										
Tram, trolley-bus and omnibus	$'000	32,979	19,116	8,618	5,879	8,136	3,345	191	935	79,199
Net revenue—										
Tram, trolley-bus and omnibus	$'000	−5,705	191	−9	346	−120	−808	20	−265	−6,350
Employees at 30 June—										
Tram, trolley-bus and omnibus	number	7,495	4,747	2,303	1,359	1,913	700	32	186	18,735
Accidents—										
Tram, trolley-bus and omnibus(*e*)—										
Persons killed	number	7	17	5	2	6	1	..	1	39
Persons injured	„	1,051	678	28	144	278	40	2	25	2,246

(*a*) Gauge 4 ft 8½ in throughout. (*b*) Included with omnibus services. (*c*) Excludes government grants. (*b*) Includes provision of reserves for depreciation, etc., where possible. (*e*) Excludes accidents to employees.

Minus sign (—) denotes deficit.

TRAMWAY, TROLLEY-BUS AND OMNIBUS SERVICES: GOVERNMENT AND MUNICIPAL AUSTRALIA, 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Route-miles at 30 June—						
Tram	miles	227	222	222	222	222
Trolley-bus	,,	65	65	65	65	64
Omnibus	,,	5,921	6,460	6,533	6,329	6,794
Vehicle miles—						
Tram	'000	25,689	24,552	23,878	23,310	22,813
Trolley-bus	,,	96,272	98,201	2,891	2,594	2,038
Omnibus	,,			96,430	98,531	99,357
Rolling stock at 30 June—						
Tram	number	1,101	1,099	1,071	1,004	1,004
Trolley-bus	,,	152	152	152	149	138
Omnibus	,,	3,540	3,680	3,776	3,469	3,571
Passenger-journeys—						
Tram	'000	231,348	218,086	203,179	186,346	179,280
Trolley-bus and omnibus	,,	471,085	466,524	450,015	435,054	429,819
Gross revenue(*a*)—						
Tram, trolley-bus and omnibus	$'000	63,688	65,110	66,700	72,362	72,847
Working expenses(*b*)—						
Tram, trolley-bus and omnibus	$'000	67,890	70,519	73,444	77,078	79,199
Net revenue—						
Tram, trolley-bus and omnibus	$'000	−4,202	−5,409	−6,744	−4,716	−6,762
Employees at 30 June—						
Tram, trolley-bus and omnibus	number	19,346	18,841	19,007	18,843	18,735
Accidents—						
Tram, trolley-bus and omnibus(*c*)—						
Persons killed	number	38	44	28	37	39
Persons injured	,,	2,839	2,606	2,474	2,303	2,246

(*a*) Excludes government grants. (*b*) Includes provision of reserves for depreciation, etc., where possible. (*c*) Excludes accidents to employees.

Minus sign (−) denotes deficit.

MOTOR VEHICLES

The arrangements for the registration of motor vehicles and the licensing of drivers and riders are not uniform throughout Australia, since they are the function of a separate authority, or authorities, in each State and Territory. Particulars of registration, licences, fees payable, etc., in each State and Territory at 30 June 1960 were given in Year Book No. 47, pages 553–6, and at 30 June 1963 in *Transport and Communication*, Bulletin No. 54, 1962–63.

Tables in this section include vehicles owned by private individuals, local government authorities, State Governments, and the Commonwealth Government (excluding those belonging to the defence services).

Motor vehicles on register

Details of motor vehicles on the register are compiled by up-dating motor vehicle census data from information made available by the various motor vehicle registration authorities in the States and Territories. Censuses of motor vehicles are taken periodically, and at these census dates considerably greater information concerning the particulars shown in the tables following is available. Particulars of the 1962 Census are shown in Year Book No. 53, 1967, *Transport and Communication*, Bulletin No. 54, 1962–63, and in special census publications.

MOTOR VEHICLES ON THE REGISTER, BY TYPE OF VEHICLE(*a*)

State or Territory and year	*Motor cars*	*Station wagons*	*Total*	*Other motor vehicles*								
				Utilities	*Panel vans*	*Trucks*	*Other truck-types*	*Omni-buses*	*Total*	*Motor cycles*	*Tota*
31 December 1968—											
New South Wales	1,013,259	210,112	1,223,371	126,380	63,621	107,238	3,921	6,626	307,786	36,385	1,567,542
Victoria	807,028	173,216	980,244	91,674	36,557	88,730	3,702	4,365	225,028	17,042	1,222,314
Queensland	n.a.	n.a.	461,449(*b*)	100,475	(*b*)	(*c*)56,739	(*c*)	3,092	160,306	15,916	637,671
South Australia	287,389	51,138	338,527	37,478	11,837	33,468	1,661	2,115	86,559	12,993	438,079
Western Australia	n.a.	n.a.	276,031	n.a.	n.a.	n.a.	n.a.	n.a.	95,098	9,987	381,116
Tasmania	94,796	16,367	111,163	13,695	7,571	10,399	330	1,223	33,218	2,501	146,882
Northern Territory	8,787	4,244	13,031	4,513	953	1,929	80	120	7,595	805	21,431
Australian Capital Territory	33,452	7,538	40,990	2,727	1,625	1,412	134	217	6,115	1,111	48,216
Australia	n.a.	n.a.	**3,444,806**	n.a.	n.a.	n.a.	n.a.	n.a.	**921,705**	**96,740**	**4,463,251**
31 December—											
1967	n.a.	n.a.	3,241,485	n.a.	n.a.	n.a.	n.a.	18,730	901,218	80,193	4,222,896
1966	n.a.	n.a.	3,060,578	n.a.	n.a.	n.a.	n.a.	17,934	888,418	68,913	4,017,909
1965	n.a.	n.a.	2,895,891	n.a.	n.a.	n.a.	n.a.	17,018	873,656	67,339	3,836,886
1964	n.a.	n.a.	2,708,741	n.a.	n.a.	n.a.	n.a.	n.a.	863,318	69,429	3,641,488
1963	n.a.	n.a.	2,499,868	n.a.	n.a.	n.a.	n.a.	15,199	844,878	74,612	3,419,358
1962(*d*)	2,068,698	231,436	2,300,134	414,156	119,897	270,881	8,091	14,319	827,344	81,859	3,209,337

(*a*) All figures after December 1962 are subject to revision. (*b*) Panel vans included with utilities. (*c*) Other truck-types included with trucks. (*d*) Census figures.

MOTOR VEHICLES(*a*) ON REGISTER PER 1,000 OF POPULATION STATES AND TERRITORIES, 1962 TO 1967

31 December—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1962(*b*)	280	301	286	339	326	293	229	316	296
1964(*c*)	308	325	320	360	347	324	261	354	323
1965(*c*)	319	334	333	364	361	339	267	367	333
1966(*c*)	329	341	344	371	379	355	279	381	343
1967(*c*)	341	351	353	378	394	365	304	395	354
1968(*c*)	354	364	364	386	409	391	335	411	367

(*a*) Excludes tractors, trailers, plant and equipment, etc. (*b*) Based on motor vehicle census figures. (*c*) Subject to revision.

Registrations of new motor vehicles

Particulars of registrations of new motor vehicles are shown by type and make of vehicle in the annual bulletin *Transport and Communication*, and by type, make, and horsepower of vehicle in monthly and annual bulletins of Motor Vehicle Registrations.

In these statistics 'registrations' means registrations processed by the motor vehicle registration authorities in the States and Territories during the period.

REGISTRATIONS OF NEW MOTOR VEHICLES, BY TYPE OF VEHICLE

State or Territory and year	*Motor cars*	*Station wagons*	*Ambulances and hearses*	*Utilities*	*Panel vans*	*Trucks*	*Other truck-types*	*Omni-buses*	*Motor cycles*	*Total*
1968—										
New South Wales	115,147	20,171	117	11,481	6,815	8,407	377	535	11,335	174,385
Victoria	84,374	15,450	86	6,679	4,110	6,000	330	336	3,284	120,649
Queensland	37,982	9,086	103	6,190	1,598	5,792	10	367	3,270	64,398
South Australia	29,424	4,598	43	2,831	999	2,151	106	187	1,940	42,279
Western Australia	27,626	6,814	32	5,261	1,962	3,192	100	167	1,622	46,776
Tasmania	9,915	1,396	11	1,134	479	664	16	104	851	14,570
Northern Territory	1,207	574	1	784	100	286	6	8	251	3,217
Australian Capital Territory	4,376	696	. .	374	255	213	25	41	334	6,314
Australia	**310,051**	**58,785**	**393**	**34,734**	**16,318**	**26,705**	**970**	**1,745**	**22,887**	**472,588**
1967	275,594	59,947	329	34,726	15,546	24,590	871	1,470	17,306	430,379
1966	245,175	61,513	349	33,154	13,351	22,970	837	1,399	9,738	388,486
1965	258,082	73,673	346	32,948	14,177	25,373	886	1,544	8,056	415,085
1964	250,050	82,973	336	32,983	14,598	25,360	805	1,384	6,488	414,977
1963	233,125	74,303	338	31,741	12,321	20,668	618	1,177	5,273	379,564

Drivers' and riders' licences

At 30 June 1968 the numbers of licences in force to drive or ride motor vehicles were: New South Wales, 1,782,997; Victoria, 1,371,673; South Australia, 486,000; Western Australia, 371,682; Tasmania, 156,489; Northern Territory, 26,088; Australian Capital Territory, 65,267. Particulars are not available for Queensland.

ROAD TRAFFIC ACCIDENTS

Accidents involving casualties, persons killed, persons injured

ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(a): NUMBER OF ACCIDENTS, PERSONS KILLED OR INJURED STATES AND TERRITORIES, 1967

State or Territory	*Number of accidents*	*Persons killed*	*Persons injured*	*Per 100,000 of mean population* *Number of accidents*	*Persons killed*	*Persons injured*	*Per 10,000 motor vehicles registered(b)* *Number of accidents*	*Persons killed*	*Persons injured*
New South Wales . .	21,610	1,117	29,501	502	26	685	150	8	204
Victoria	14,331	887	20,636	437	27	630	126	8	182
Queensland . . .	7,015	502	9,850	412	29	578	118	8	166
South Australia(c) . .	7,242	253	9,955	651	23	895	174	6	239
Western Australia . .	4,659	256	6,426	531	29	733	137	8	189
Tasmania	1,342	101	2,095	356	27	556	99	7	155
Northern Territory . .	359	27	541	604	45	910	207	16	312
Australian Capital Territory .	695	23	1,017	670	22	980	172	6	252
Australia . . .	**57,253**	**3,166**	**80,021**	**484**	**27**	**677**	**139**	**8**	**194**

(a) Accidents reported to the police which occurred in public thoroughfares and which resulted in death within thirty days or in bodily injury to an extent requiring surgical or medical treatment. (b) Average number of motor vehicles on register. (c) Prior to 1 October 1967 includes accidents in which the injured persons did not require surgical or medical treatment and the number of persons injured in accidents who did not require surgical or medical treatment. Horizontal line in the table below indicates break in series.

ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(a): NUMBER OF ACCIDENTS, PERSONS KILLED OR INJURED STATES AND TERRITORIES, 1963 TO 1967

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A. (b)*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Total* *Number*	*Per 100,000 of mean population*	*Per 10,000 motor vehicles registered(c)*
Accidents involving casualties—											
1963 . . .	18,101	12,590	6,724	6,299	4,057	1,051	218	425	49,465	452	149
1964 . . .	19,399	13,991	7,220	6,998	4,062	1,184	224	476	53,554	480	152
1965 . . .	21,052	14,336	7,134	7,267	4,170	1,206	232	535	55,932	491	150
1966 . . .	20,919	14,084	6,878	7,031	4,346	1,377	310	593	55,538	479	141
1967 . . .	21,610	14,331	7,015	7,242	4,659	1,342	359	695	57,253	484	139
Persons killed—											
1963 . . .	900	780	398	223	198	75	16	8	2,598	24	8
1964 . . .	1,010	904	461	238	222	89	25	17	2,966	27	8
1965 . . .	1,151	929	467	243	252	93	14	15	3,164	28	8
1966 . . .	1,143	955	466	270	253	104	34	17	3,242	28	8
1967 . . .	1,117	887	502	253	256	101	27	23	3,166	27	8
Persons injured—											
1963 . . .	24,652	17,577	9,445	8,271	5,399	1,595	313	628	67,880	620	205
1964 . . .	26,631	19,836	10,383	9,222	5,450	1,709	297	730	74,258	665	210
1965 . . .	29,157	20,446	10,078	9,491	5,638	1,815	329	769	77,723	682	208
1966 . . .	28,981	20,160	9,936	9,369	5,997	2,092	446	856	77,837	671	198
1967 . . .	29,501	20,636	9,850	9,955	6,426	2,095	541	1,017	80,021	677	194

(a) *See* footnote (a) to previous table. (b) *See* footnote (c) to previous table. (c) *See* footnote (b) to previous table.

Types of road user killed or injured

Responsibility for cause of accident is not indicated by this classification.

ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(*a*): PERSONS KILLED OR INJURED TYPES OF ROAD USER INVOLVED, STATES AND TERRITORIES, 1967

Type of road user	*N.S.W.*	*Vic.*	*Qld*	*S.A.* (*b*)	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Total*
PERSONS KILLED									
Drivers of motor vehicles	405	319	201	96	113	35	12	11	1,192
Motor cyclists . .	54	14	13	8	6	1	..	..	96
Pedal cyclists . .	23	36	20	14	4	2	..	..	99
Passengers (all types)(*c*)	305	281	156	86	75	42	8	9	962
Pedestrians . . .	329	230	110	49	58	21	7	2	806
Other classes(*d*) . .	1	7	2	..	..	..	..	1	11
Total . .	**1,117**	**887**	**502**	**253**	**256**	**101**	**27**	**23**	**3,166**
PERSONS INJURED									
Drivers of motor vehicles	11,609	8,158	3,883	3,943	2,680	879	213	444	31,809
Motor cyclists . .	1,337	416	487	660	329	57	45	54	3,385
Pedal cyclists . .	825	986	455	730	339	42	18	54	3,449
Passengers (all types)(*c*)	11,540	8,513	4,041	3,765	2,308	929	221	401	31,718
Pedestrians . . .	4,155	2,515	967	853	763	187	44	62	9,546
Other classes(*d*) . .	35	48	17	4	7	1	..	2	114
Total . .	**29,501**	**20,636**	**9,850**	**9,955**	**6,426**	**2,095**	**541**	**1,017**	**80,021**

(*a*) Accidents reported to the police which occurred in public thoroughfares and which resulted in death within thirty days or in bodily injury to an extent requiring surgical or medical treatment. (*b*) Prior to 1 October 1967 includes accidents in which the injured persons did not require surgical or medical treatment and the number of persons injured in accidents who did not require surgical or medical treatment. (*c*) Includes pillion riders. (*d*) Includes tram drivers, riders of horses and drivers of animal-drawn vehicles.

Age groups of persons killed or injured

ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(*a*): PERSONS KILLED OR INJURED BY AGE GROUP, STATES AND TERRITORIES, 1967

Age group (years)	*N.S.W.*	*Vic.*	*Qld*	*S.A.* (*b*)	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
PERSONS KILLED									
Under 5	37	41	20	7	3	1	1	1	111
5 and under 7 . .	21	11	9	4	4	2	..	1	52
7 „ „ 17 . .	89	65	34	22	22	14	..	2	248
17 „ „ 21 . .	171	147	101	47	48	23	2	7	546
21 „ „ 30 . .	226	168	86	44	43	19	4	5	595
30 „ „ 40 . .	103	96	44	18	29	8	8	5	311
40 „ „ 50 . .	131	97	62	30	27	11	6	..	364
50 „ „ 60 . .	126	87	60	26	26	9	3	..	337
60 and over . . .	212	174	86	50	52	13	3	2	592
Not stated . . .	1	1	..	5	2	1	..	..	10
Total . .	**1,117**	**887**	**502**	**253**	**256**	**101**	**27**	**23**	**3,166**
PERSONS INJURED									
Under 5	966	713	333	317	234	63	25	34	2,685
5 and under 7 . .	578	419	163	199	121	52	15	17	1,564
7 „ „ 17 . .	3,315	2,411	1,270	1,416	792	240	41	123	9,608
17 „ „ 21 . .	6,245	4,479	2,365	1,987	1,344	521	95	260	17,296
21 „ „ 30 . .	6,405	4,442	2,042	1,657	1,185	404	181	244	16,560
30 „ „ 40 . .	3,644	2,420	1,037	965	627	229	97	123	9,142
40 „ „ 50 . .	3,209	2,186	938	980	603	166	44	90	8,216
50 „ „ 60 . .	2,486	1,620	755	731	482	132	29	79	6,314
60 and over . . .	2,210	1,526	724	584	457	101	13	36	5,651
Not stated . . .	443	420	223	1,119	581	187	1	11	2,985
Total . .	**29,501**	**20,636**	**9,850**	**9,955**	**6,426**	**2,095**	**541**	**1,017**	**80,021**

a) *See* footnote (*a*) to table above. (*b*) *See* footnote (*b*) to table above.

Types of accidents

ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(*a*): NUMBER OF ACCIDENTS AND PERSONS KILLED OR INJURED, BY TYPE OF ACCIDENT, STATES AND TERRITORIES, 1967

Type of accident	*N.S.W.*	*Vic.*	*Qld*	*S.A.* (*b*)	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
NUMBER OF ACCIDENTS									
Collisions between vehicles	11,443	7,849	3,101	4,239	2,435	693	152	423	30,335
Vehicle overturning or leaving road	2,873	2,512	2,457	922	1,190	387	119	166	10,626
Vehicle colliding with pedestrian	4,177	2,560	1,037	854	802	200	48	65	9,743
Vehicle colliding with fixed object(*c*)	2,809	1,239	227	1,156	163	48	27	26	5,695
Passenger accidents	154	93	69	29	34	7	2	11	399
Vehicle colliding with animal	147	59	98	29	23	7	8	3	374
Other	7	19	26	13	12	..	3	1	81
Total	**21,610**	**14,331**	**7,015**	**7,242**	**4,659**	**1,342**	**359**	**695**	**57,253**
PERSONS KILLED									
Collisions between vehicles	418	390	189	121	101	40	9	15	1,283
Vehicle overturning or leaving road	173	198	184	45	90	36	9	6	741
Vehicle colliding with pedestrian	326	222	111	48	59	22	7	2	797
Vehicle colliding with fixed object(*c*)	185	68	5	39	3	1	1	..	302
Passenger accidents	9	6	8	..	3	1	1	..	28
Vehicle colliding with animal	5	1	4	..	..	1	..	..	11
Other	1	2	1	..	..	..	..	..	4
Total	**1,117**	**887**	**502**	**253**	**256**	**101**	**27**	**23**	**3,166**
PERSONS INJURED									
Collisions between vehicles	17,310	12,467	4,794	6,146	3,674	1,202	280	646	46,519
Vehicle overturning or leaving road	3,953	3,818	3,524	1,290	1,670	631	163	242	15,291
Vehicle colliding with pedestrian	4,080	2,472	1,011	857	782	186	46	67	9,501
Vehicle colliding with fixed object(*c*)	3,808	1,690	290	1,581	221	63	36	42	7,731
Passenger accidents	163	97	65	32	32	7	1	14	411
Vehicle colliding with animal	177	72	126	32	34	6	10	5	462
Other	10	20	40	17	13	..	5	1	106
Total	**29,501**	**20,636**	**9,850**	**9,955**	**6,426**	**2,095**	**541**	**1,017**	**80,021**

(*a*) Accidents reported to the police which occurred in public thoroughfares and which resulted in death within thirty days or in bodily injury to an extent requiring surgical or medical treatment. (*b*) Prior to 1 October 1967 includes accidents in which the injured persons did not require surgical or medical treatment and the number of persons injured in accidents who did not require surgical or medical treatment. (*c*) Includes parked vehicles.

ROADS

Summary of roads used for general traffic

Proclaimed or declared roads. The table following is a summary of the roads proclaimed or declared under the Acts of the several States relative to the operations of the central road authorities, and shows the lengths of various classes proclaimed or declared as at 30 June 1968. The central road authority in each State assumes responsibility under the Act for the whole, or a proportion, of the cost of construction and or maintenance of these roads, the extent varying from State to State and with the class and locality of the roads. Before proclamation of a main road, consideration is given, in general, to the following points: availability of funds; whether the road is, or will be, within one of several classes of main trunk routes; the value of the roads as connecting links between centres of population or business; whether the district is, or will be, sufficiently served by railways. Provision is also made in some States for the declaration of roads other than main roads. The absence of a particular class in any State does not necessarily imply that there are no roads within that State that might be so classified; the classes are restricted only to roads proclaimed or declared under the Acts. A further point to make is that, through various causes, e.g. insufficiency of funds, man-power or materials, etc., construction or maintenance may not keep pace with gazettals of mileages, and, therefore, the condition of a road may not match its status.

PROCLAIMED OR DECLARED ROADS: LENGTHS, STATES, 30 JUNE 1968
(Miles)

Class of road	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A. (a)*	*Tas.*	*Total*
State highways	6,563	4,460	6,242	8,156	3,435	1,206	60,797
Trunk roads	4,228	9,097	5,150			667	
Ordinary main roads	11,593						
Total main roads	*22,384*	*13,557*	*11,392*	*8,156*	*3,435*	*1,873*	*60,797*
Secondary roads	(b)159	..	(c)8,893	..	7,958	197	17,207
Developmental roads	2,747	..	4,377	..	(d)43,930	..	51,054
Tourist roads	218	483	..	..	..	47	748
Other roads	..	(e)501	..	..	(f)74	(g)179	754
Total other roads	*3,124*	*984*	*13,270*	..	*51,962*	*423*	*69,763*
Grand total	**25,508**	**14,541**	**24,662**	**8,156**	**55,397**	**2,296**	**130,560**

(a) 30 June 1967. (b) Metropolitan only. (c) Includes mining access roads, farmers' roads and tourist tracks. (d) Maintenance of these roads is the responsibility of the several local authorities. (e) Forest roads and by-pass roads. (f) Gazetted as controlled access roadway but not constructed. (g) Subsidised roads.

Total roads. The following table represents an attempt to classify all the roads open for general traffic in Australia, at the latest dates available, according to States and Territories and to certain broad surface groups. The figures in the table for the States are obtained from the Deputy Commonwealth Statistician in each State, and are derived mainly from local government sources.

ALL ROADS OPEN FOR GENERAL TRAFFIC: LENGTHS, STATES AND TERRITORIES, 30 JUNE 1968
(Miles)

Surface of roads	*N.S.W. (a)*	*Vic.*	*Qld*	*S.A.*	*W.A. (b)*	*Tas.*	*N.T.*	*A.C.T.*	*Total*
Bitumen or concrete	28,621	29,365	18,161	8,547	13,806	3,366	1,798	535	104,199
Gravel, crushed stone or other improved surface	44,668	29,618	18,401	16,834	23,193	8,608	1,190	213	142,725
Formed only	26,947	20,606	41,037	9,347	45,746	1,437	1,780	78	314,032
Cleared only	31,094	21,333	40,758	40,287	26,362		7,220	..	
Total	**131,330**	**100,922**	**118,357**	**75,015**	**109,107**	**13,411**	**11,988**	**826**	**560,956**

(a) 30 June 1966. (b) 30 June 1967.

Further information on roads, including financial particulars, is included in Chapter 20, Local Government.

Australian Road Research Board

The Australian Road Research Board was established by the road authorities of the Commonwealth and State Governments in 1960 as a national centre for road research. The Board was incorporated in January 1965 as a public company by guarantee, memorandums and articles of association being drafted in general conformity with the constitution which had been accepted in 1960. The company members are the Commonwealth of Australia, the commissioners of the central road authorities in New South Wales, Queensland, South Australia, and Western Australia, the Department of Public Works, Tasmania, and the Country Roads Board, Victoria. The Director-General of the Commonwealth Department of Public Works and the departmental heads of the other road authorities constitute the Board, which controls all policy and activities. Finance for all activities has been provided by the company members on an agreed basis.

The objectives of A.R.R.B. include planning an adequate programme of research and development, arranging for individual projects to be carried out directly and by co-operating organisations, and providing conferences and publications to bring these and other advances to everyone interested in roads. Publications include *Proceedings* of biennial national research conferences commencing in 1962, the journal *Australian Road Research* issued four times a year, and separate reports and bulletins resulting from special research projects. The following list of possible subjects indicates the range of studies provided for in the original constitution: road planning, location, design, safety, materials, construction, maintenance, structures, equipment, traffic and transport, economics, administration, financing, management, accounting, and any other matters affecting the provision, upkeep, use, protection, and development of roads. In planning a creative programme the Board continues to look for those subjects which seem to offer the highest profit to road engineers and the community.

The work on research projects is carried out either directly by the Board's own staff, in many cases acting in co-operation with the road authorities of the various governments, or through co-operative projects established with departments of universities in Adelaide, Brisbane, Melbourne, Perth, and Sydney. The Board has endeavoured to provide or sustain the additional staff required for these external projects, but university staff members furnish advice and co-operation in all parts of these studies.

As with most research organisations, the Board has made very full use of systematic consultation through various advisory groups. Members of these groups have been recruited from persons with the ability to contribute, who were prepared to serve as individuals and not as representatives of particular organisations. In an attempt to secure completely unfettered counsel, most of the members of the advisory groups were drawn from outside the Board and its staff. The various committees include a general Advisory Council and several particular types of specialist committees. In addition, the technical committees of the National Association of Australian State Road Authorities have, from the initiation of A.R.R.B., been a continuing and valuable source of advice and consultation. In this way, therefore, exceedingly valuable advice has been obtained from individuals drawn from the State road authorities, local authorities, C.S.I.R.O., Australian universities, several Commonwealth departments, and from private companies and consultants.

Commonwealth Bureau of Roads

The Commonwealth Bureau of Roads is a Statutory Authority established under the provisions of the *Commonwealth Bureau of Roads Act* 1964. The Bureau consists of a full-time Chairman and two part-time Members appointed by the Governor-General and is served by a small secretariat. Broadly, the responsibilities of the Bureau are to advise the Commonwealth Government, through the Minister for Shipping and Transport, on matters relating to roads and road transport and government financial assistance in this area.

CIVIL AVIATION

Department of Civil Aviation

Control of civil aviation in Australia is exercised by the Department of Civil Aviation, which was established in 1939 to take over from the Civil Aviation Board the regulation of civil aviation in Australia. The Department's jurisdiction covers not only Australia but also Papua, New Guinea and areas of the Indian and Pacific Oceans. Year Books Nos 16, 19 and 38 trace the establishment of civil aviation control in Australia and the appropriate Acts of Parliament and Regulations under which this control is exercised. The present functions of the Department are shown in Year Book No. 51, pages 578–9, and further details about its operations are given in the annual reports to the Commonwealth Parliament by the Minister for Civil Aviation.

Regular air services within Australia

Interstate services. Scheduled interstate services with passenger and all-freight aircraft are provided by two airlines only, the private enterprise airline Ansett Airlines of Australia (a subsidiary of Ansett Transport Industries) and the Commonwealth-owned Trans-Australia Airlines. All principal routes are competitive, with both airlines providing equal capacities in accord with legislation passed by the Commonwealth Parliament. The two principal Acts which establish the legislative basis of this controlled competition are the *Airlines Agreement Act* 1952–1961 and the *Airlines Equipment Act* 1958. The Airlines Equipment Act established the machinery for the achievement and maintenance of comparable, but not necessarily identical, aircraft fleets between T.A.A. and Ansett Airlines of Australia, and is designed to prevent the provision of excess aircraft capacity. The Airlines Agreement Act established the basis of control of the two-airline competitive system and extended this machinery to 1977.

In addition to purely interstate services, both Ansett Airlines of Australia and Trans-Australia Airlines operate routes to New Guinea and non-competitive intra-state routes in Australia. The Ansett Airlines of Australia non-competitive routes radiate mainly from Melbourne, while those of Trans-Australia Airlines are located mainly within Queensland and Tasmania. In addition, Trans-Australia Airlines operate services within Papua-New Guinea in competition with another Ansett subsidiary, Ansett Airlines of Papua, and the independent Papuan Airlines.

At 31 December 1968 the Ansett Airlines of Australia fleet included four Boeing 727's, five DC-9's, three Electras, six Viscounts, ten Friendships, three Carvairs, a number of DC-4's and DC-3's, two helicopters, and smaller aircraft. At the same date Trans-Australia Airlines operated a fleet of four Boeing 727's, five DC-9's, three Electras, seven Viscounts, thirteen Friendships, a number of DC-4's and DC-3's, one helicopter, and smaller aircraft.

Intra-state services. In addition to the intra-state services operated by Ansett Airlines of Australia and Trans-Australia Airlines there are a number of smaller regional airlines operating from Sydney (Airlines of New South Wales and East-West Airlines), Adelaide (Airlines of South Australia), Perth (MacRobertson Miller Airlines), and Alice Springs (Connellan Airways). With the exception of Connellan Airways, which provides regular service to outback homesteads and communities, all of these are concerned primarily with traffic moving to and from the respective capital city. With the exception of the independently owned East-West Airlines and Connellan Airways, all regional airlines are subsidiaries of Ansett Transport Industries. The largest aircraft used by these regional airlines are Viscounts, DC-4's, Convairs and Friendships, supported by DC-3's. Connellan Airways uses smaller aircraft types.

Commuter services. These are not airline services but regular flights by charter firms with small single and twin-engined aircraft operating to fixed and published timetables. They provide regular air links between many centres, towns and country areas which are either not served by the major airlines or have no direct air service with their capital or nearest major provincial city. The first commuter service approved was for Opal Air Pty Ltd, of Coober Pedy (S.A.), to operate between Adelaide and the South Australian opal fields. At 31 December 1968 sixteen charter operators were operating commuter services in Australia. Details of the operations of these commuter services are excluded from the statistics shown in this section.

Internal operations. Particulars of the revenue operations of all regular internal air services during each of the years 1963–64 to 1967–68 are set out in the next table.

CIVIL AVIATION: OPERATIONS OF REGULAR INTERNAL SERVICES AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64(b)	*1964–65(b)*	*1965–66*	*1966–67*	*1967–68*
Hours flown	number	244,517	256,231	261,535	255,510	240,801
Miles flown	'000	48,971	52,323	55,020	56,759	56,724
Passengers—						
Embarkations	number	3,256,937	3,763,936	4,157,873	4,424,652	4,668,153
Passenger-miles	'000	1,408,317	1,639,087	1,831,360	1,972,469	2,125,314
Freight—						
Tons uplifted	short tons	63,161	69,959	76,079	82,056	85,063
Ton-miles(*c*)	'000	30,491	33,891	37,577	40,148	42,320
Mail—						
Tons uplifted	short tons	7,082	7,736	8,633	9,587	9,410
Ton-miles(*c*)	'000	3,741	4,074	4,587	5,144	5,174

(*a*) Includes flights of all Australian-owned airlines with the exception of those of Qantas Airways Limited between airports located within the Commonwealth. (*b*) Excludes, for flights between Australia and Papua-New Guinea, operations between airports located within the Commonwealth. (*c*) In terms of short tons.

Internal passenger embarkations and disembarkations

Traffic statistics have been compiled by aggregating for all individual airline flights the traffic loaded and unloaded at each airport. Flights between Australia and Papua-New Guinea and Australia and Norfolk Island are included. At ports where different flights connect, figures are overstated to the extent of the through traffic transferring between flights.

INTERNAL AIRWAYS PASSENGER EMBARKATIONS AND DISEMBARKATIONS AT PRINCIPAL AUSTRALIAN AIRPORTS, 1963-64 TO 1967-68

Airport	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Sydney	1,802,618	2,086,571	2,244,218	2,435,284	2,641,147
Melbourne	1,393,227	1,587,833	1,748,478	1,880,860	2,043,542
Brisbane	635,468	754,296	814,097	854,370	937,660
Adelaide	526,764	618,101	738,402	770,408	863,652
Canberra	263,331	318,882	331,203	341,058	410,701
Perth	175,351	209,972	257,406	278,662	315,744
Townsville	111,207	137,079	152,384	145,161	188,761
Hobart	143,066	158,287	167,077	178,314	182,459
Launceston	142,490	152,175	155,057	159,402	156,443
Cairns	69,914	83,503	83,996	86,598	92,048
Coolangatta	61,949	76,720	88,456	97,343	85,543
Mackay.	45,310	61,071	72,411	72,407	78,179
Rockhampton	46,524	55,809	63,250	65,777	68,150
Darwin	34,159	38,804	49,131	57,557	65,535
Devonport	39,377	45,401	48,089	55,213	61,250
Wynyard	32,020	34,966	40,617	51,932	54,888
Dubbo	40,791	34,904	41,903	44,852	49,856
Wagga	41,135	43,404	46,179	53,273	46,314
Cooma	46,864	50,757	44,098	44,060	44,486
Kingscote	32,821	40,591	42,197	44,764	44,316
Tamworth	36,869	40,253	37,589	38,141	41,960
Port Lincoln	33,859	38,858	41,024	42,643	40,423

International activity

International organisations. A full report of the formation of the International Civil Aviation Organization, the Commonwealth Air Transport Council, and the South Pacific Air Transport Council appeared in Year Book No. 37, and particulars of subsequent activity in the international field were included in No. 38. The International Civil Aviation Organization had a membership of 116 nations in June 1968. Australia has continued its position as a member of the Council, which it has held since I.C.A.O. was established in 1947. Further details will be found in Year Book No. 40 and earlier issues.

International agreements. Australia had air services agreements with twenty countries at 31 December 1968. They were Austria, Britain, Canada, Ceylon, France, Federal Republic of Germany, India, Iran, Ireland, Italy, Japan, Lebanon, Malaysia, Netherlands, New Zealand, Singapore, South Africa, Thailand, United Arab Republic, and the United States of America. Under these agreements Australia is granted rights to operate services between Australia to and through the countries in question; these rights are exercised by Australia's international airline Qantas. In return the designated airline of the signatory country is granted traffic rights in Australia. Australia also had air services arrangements with fifteen other countries at 31 December 1968. These were Burma, Cambodia, the Republic of China, Greece, Indonesia, Iraq, Laos, Mexico, the Philippines, Portugal, Saudi Arabia, Syria, Turkey, the Republic of Vietnam, and Yugoslavia. Qantas also operates services through several of these countries under these arrangements and in other cases overflies the country concerned.

International air services. In December 1968 thirteen overseas international airlines were operating regular scheduled services to Australia. These included: Air-India (India), Air New Zealand (New Zealand), Alitalia (Italy), British Overseas Airways Corporation (United Kingdom), Canadian Pacific Air Lines (Canada), Deutsche Lufthansa (Federal Republic of Germany), K.L.M.

Royal Dutch Airlines (Netherlands), Malaysia-Singapore Airlines (Malaysia and Singapore), Pan-American World Airways (United States of America), Philippine Air Lines (Philippines), South African Airways (South Africa), and Union de Transports Aeriens (France). Trans-Australia Airlines operates between Darwin and Portuguese Timor under charter to Transportes Aereos de Timor. Qantas, Australia's international airline, operates twenty-one Boeing 707-338C jet aircraft, and one Lockheed Electra aircraft. All the shares in Qantas Airways Limited are owned by the Commonwealth Government.

International operations. The table following shows particulars of international airline traffic during 1967–68 moving into and out of an area which embraces the Commonwealth of Australia, Papua-New Guinea, and Norfolk Island. These figures do not include traffic between Australia and Papua-New Guinea and Norfolk Island.

CIVIL AVIATION: INTERNATIONAL AIRLINE TRAFFIC TO AND FROM AUSTRALIA(*a*), 1967-68

Type of traffic	*Aircraft movements*	*Passengers*	*Freight*	*Mail*
Traffic to Australia—			short tons	short tons
Qantas Airways Limited . . .	2,528	178,828	5,859	1,190
Other airlines	3,332	213,675	6,593	1,469
All airlines	*5,860*	*392,503*	*12,452*	*2,659*
Traffic from Australia—				
Qantas Airways Limited . . .	2,550	166,492	3,949	860
Other airlines	3,338	186,352	4,420	838
All airlines	*5,888*	*352,844*	*8,369*	*1,698*

(*a*) Australian mainland and adjacent Territories (Papua-New Guinea and Norfolk Island).

Particulars of revenue operations of Australian regular overseas services are shown in the following table. These operations include all stages of Qantas flights linking Australia with external territories and overseas countries, and stages external to the Commonwealth for flights of other Australian-owned airlines; they exclude flights over stages located within Papua-New Guinea (*see* footnote (*a*) to table following for years prior to 1965–66).

CIVIL AVIATION: OPERATIONS OF AUSTRALIAN REGULAR OVERSEAS SERVICES 1963-64 TO 1967-68

		1963–64(a)	*1964–65(a)*	*1965–66*	*1966–67*	*1967–68*
Hours flown . . .	number	53,792	68,028	68,405	66,840	70,611
Miles flown	'000	22,357	28,126	29,635	29,201	31,914
Passengers—						
Embarkations . .	number	352,442	443,665	448,623	466,849	562,855
Passenger-miles . . .	'000	1,185,981	1,527,039	1,569,513	1,608,868	1,970,008
Freight—						
Tons uplifted . .	short tons	8,071	10,293	11,451	12,259	13,733
Ton-miles(*b*) . . .	'000	38,633	51,826	61,836	62,939	67,733
Mail—						
Tons uplifted . .	short tons	2,654	3,124	3,252	2,697	3,170
Ton-miles(*b*) . . .	'000	16,057	19,891	20,914	16,500	19,209

(*a*) Includes, for flights between Australia and Papua-New Guinea, operations over stages located within the Commonwealth and within Papua-New Guinea. (*b*) In terms of short tons.

General aviation

General aviation activity, which covers all non-airline operations such as charter, aerial work and private flying, has grown rapidly throughout Australia in the post-war period so that now it is an important sector of the Australian aviation industry. In 1967, hours flown totalled 993,006 compared with 345,319 hours flown by Australian airline aircraft. At 30 June 1968, aircraft employed in general aviation numbered 3,037.

Commonwealth aid to flying training

The Commonwealth Government has provided financial assistance to the flying training movement in Australia since 1926. Direct subsidy to aero clubs and flying schools ceased in June 1967, and the Government assistance now consists of:

$100,000 each year for the awarding of Commonwealth Flying Scholarships;

$75,000 each year for the awarding of additional flying scholarships in partnership with the airlines;

$18,000 and $3,000 each year respectively as secretariat grants to the Royal Federation of Aero Clubs and the Association of Commercial Flying Organisations.

This scheme of assistance is for a five year term ending in 1970–71.

The Australian Flying Scholarship Scheme is designed to help young Australians train as career pilots for Australia's commercial aviation industry. The scholarships provided financial aid in much the same way as Commonwealth scholarships provide for students undertaking other professions. They enable scholarship winners to train to commercial pilot licence, instructor rating, agricultural rating or instrument rating standard. Since the scheme started in 1962, 1,240 scholarships have been awarded.

In addition, the Government has agreed to guarantee the repayment of loans made by the Commonwealth Bank to small country aero clubs for the purchase of training aircraft, the guarantees being limited to a total of $80,000 in 1968–69 and $40,000 in each succeeding year until a maximum of $200,000 is reached. This scheme replaces the Government's Aircraft Replacement Fund, which previously subsidised the purchase of aircraft by these clubs.

Sixty-four clubs were affiliated with the Gliding Federation of Australia in 1967–68 and there were more than 2,100 members. During 1967–68 the Commonwealth assisted gliding clubs to the extent of $15,000. The total of all subsidy payments and financial assistance to flying training organisations and the gliding movement during 1967–68 was $211,000.

Aerodromes

The number of aerodromes throughout Australia and its Territories at 30 June 1968 was 670. One hundred and nineteen were owned by the Commonwealth Government and 551 by local authorities and private interests. Capital expenditure on aerodrome and building construction was $22.7 million in 1967–68. Maintenance expenditure on Commonwealth-owned aerodromes during 1967–68 was $3.63 million, and development grants to licensed aerodromes participating in the Local Ownership Plan totalled $750,000. The two major projects at Melbourne and Sydney are proceeding satisfactorily. The work at Sydney, which involves a major runway extension and a new international terminal, is estimated to cost $50 million. The new Melbourne airport is to cost $50 million including site acquisition. The projects as a whole are expected to be completed in 1970, but progressive use is being made of the facilities as they become available.

Airways facilities

Concurrently with the five-year aerodrome development programme, the Commonwealth Government has approved major extensions and improvements to Australia's air navigation and communications system. New long-range radar units have been installed at Sydney, Melbourne, Brisbane and Adelaide to assist air traffic control, and other units are being established at Perth, Canberra and in northern New South Wales. Total cost of this radar programme is approximately $8 million. In addition, terminal area radars are to be installed at Sydney and Melbourne at a total cost of $1.5 million.

The expanding needs of aviation are reflected in the accelerated rate of installation of navigational aids. During 1967–68 36 aids were installed, compared with 31 in the preceding two years. The number of navigational aids operating throughout the Commonwealth at 31 December 1968 totalled 347. These included 93 distance measuring equipment (DME) beacons, 25 visual aural ranges (VAR), 195 non-directional beacons (NDB), 21 VHF omni radio ranges (VOR) and 13 instrument landing systems (ILS).

Aircraft on the Australian register

CIVIL AVIATION: AIRCRAFT ON AUSTRALIAN REGISTER, 30 JUNE 1968

Type of aircraft	*Number of engines*				*Total aircraft*
	One	*Two*	*Three*	*Four*	
Fixed-wing powered aircraft—					
Turbo-jet	..	12	8	25	45
Turbo-prop	5	53	..	29	87
Piston-engined 20,000 lb and over maximum take-off weight	..	71	..	15	86
Piston-engined under 20,000 lb maximum take-off weight	2,721	323	7	3	3,054
Helicopters	83	1	..	..	84
Total powered aircraft	*2,809*	*460*	*15*	*72*	*3,356*
Gliders	..	..	..	..	233

Particulars of powered aircraft according to manufacturer and air navigation class in which registered, and further details of gliders, may be found in the bulletin *Transport and Communication*, No. 59, 1967–68.

Civil aviation registrations, licences, etc., in force in Australia

CIVIL AVIATION: REGISTRATIONS, LICENCES, ETC., AUSTRALIA(*a*) 1964 TO 1968

	30 June—				
	1964	*1965*	*1966*	*1967*	*1968*
Registered aircraft owners	1,167	1,293	1,481	1,685	1,845
Registered aircraft(*b*)	1,936	2,207	2,605	2,970	3,356
Pilots' licences—					
Private	4,720	5,382	6,365	7,828	9,282
Private helicopter	6	6	7	10	10
Commercial	1,263	1,411	1,616	1,938	2,326
Senior commercial	189	192	192	224	244
Commercial helicopter	53	59	83	127	152
Senior commercial helicopter	..	5	6	9	12
Student	5,676	6,907	8,109	9,921	10,130
Student helicopter	41	66	96	123	100
1st class airline transport	670	750	807	819	826
2nd class airline transport	603	725	822	838	887
Flight navigators' licences	137	154	208	222	211
1st class flight radio-telegraph operators' licences	19	18	19	19	18
Flight radio-telephone operators' licences	7,956	9,102	10,831	13,157	15,040
Flight engineers' licences	215	429	495	563	539
Aircraft maintenance engineers' licences	2,553	2,779	2,879	2,954	3,278
Aerodromes—					
Government(*c*)	113	110	110	107	107
Licensed(*d*)	381	386	385	377	381
Flying-boat bases(*e*)	13	13	13	13	13

(*a*) Except for aerodromes and flying-boat bases, includes the Territory of Papua-New Guinea. (*b*) Excludes gliders. At 30 June 1968 there were 233 gliders registered. (*c*) Under the control and management of the Department of Civil Aviation. (*d*) Under the control and management of a municipality, shire, station owner, private individual, etc. Includes emergency aerodromes. *e*) Includes alighting areas.

Accidents and casualties

CIVIL AVIATION: ACCIDENTS INVOLVING CASUALTIES(*a*), AUSTRALIA(*b*), 1963-64 TO 1967-68

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number	26	17	37	38	36
Persons killed	24	15	29	66	47
Persons seriously injured	15	7	28	24	30

(*a*) Accidents involving civil aircraft which resulted in death or serious injury. Excludes parachutists killed on contact with earth after an uninterrupted fall. (*b*) Excludes accidents outside Australia involving aircraft on the Australian register.

POSTS; INTERNAL AND OVERSEAS TELECOMMUNICATION SERVICES; RADIOCOMMUNICATION STATIONS

In this division particulars for the Australian Capital Territory are included with those for New South Wales, and the South Australian figures include particulars for the Northern Territory, unless otherwise indicated. The Central Office of the Postmaster-General's Department is located in Melbourne, Victoria.

Postmaster-General's Department—General

Under the provisions of the *Post and Telegraph Act* 1901–1968 the Postmaster-General's Department is responsible for the control and operation of postal, telegraphic and telephonic services throughout Australia. The Postmaster-General's Department is also responsible for the provision and operation of the transmitters and technical facilities, other than studio equipment, required for broadcasting and television services by the Australian Broadcasting Commission (*see* pages 423–5), and, in conjunction with the Overseas Telecommunications Commission (*see* pages 421–2), with whom there is close co-operation, provides facilities for communication with overseas countries. Subsidiary to its major activities, the Postmaster-General's Department performs a number of important functions for other Commonwealth and State departments including the collection of broadcast and television licence fees, war service and repatriation repayments, the provision of banking facilities on behalf of the Commonwealth Savings Bank, the sale of tax and duty stamps, the collection of land tax and the over-the-counter distribution of a variety of official forms.

Research

The Postmaster-General's Department maintains its own research facilities as part of the headquarters organisation in Melbourne. The P.M.G. Research Laboratories had an establishment in 1968 of 386 including 116 professional staff, mainly engineers, physicists, chemists and metallurgists. The main responsibilities of the laboratories are to conduct research and development in telecommunications theory and practice, particularly as applying to the Australian region; to appraise new developments in telecommunication equipment; and to design apparatus and systems required for special applications in the telecommunications and mail handling networks in Australia in cases where these needs could not be met from commercial sources.

Postal facilities

The following table shows the number of post offices, the area in square miles and the number of inhabitants to each post office (including non-official offices), and the number of inhabitants to each 100 square miles in each State and in Australia at 30 June 1968.

POSTAL FACILITIES: RELATION TO AREA AND POPULATION, STATES 30 JUNE 1968

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
Post offices—							
Official	522	331	235	173	156	56	1,473
Non-official	1,830	1,650	960	738	476	389	6,043
Total post offices	*2,352*	*1,981*	*1,195*	*911*	*632*	*445*	*7,516*
Square miles of territory per office	132	44	558	988	1,544	59	395
Inhabitants per office	1,911	1,678	1,450	1,304	1,439	858	1,601
Inhabitants per 100 square miles	1,448	3,782	260	132	93	1,448	405

Employment

PERSONS PROVIDING POST OFFICE SERVICES: CENTRAL OFFICE AND STATES 30 JUNE 1968

	Central Office	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
Official full-time staff(*a*)—								
Permanent officers	1,883	24,981	17,312	10,861	7,861	5,561	2,699	71 158
Temporary and exempt employees .	285	13,128	9,753	2,991	1,958	1,904	742	30,761
Total	*2,168*	*38,109*	*27,065*	*13,852*	*9,819*	*7,465*	*3,441*	*101,919*
Other(*b*)—								
Non-official postmasters and postmistresses	..	1,823	1,640	970	739	474	395	6,041
Other staff at non-official offices .	..	497	627	287	212	63	35	1,721
Telephone office-keepers	..	209	79	355	94	202	14	953
Mail contractors (including persons employed to drive vehicles) . .	..	1,963	1,052	1,261	330	323	189	5,118
Total	..	*4,492*	*3,398*	*2,873*	*1,375*	*1,062*	*633*	*13,833*

(*a*) Persons directly under the control of the Department. Excludes 3,115 part-time staff. (*b*) Persons not directly under the control of the Department. Includes persons employed, either full-time or part-time, under contract or in return for payments appropriate to work performed.

Cash revenue, branches—Postmaster-General's Department

The cash revenue represents actual departmental collections by source as recorded for Treasury purposes. The earnings of the Department, which include revenue earned but not actually received, are shown in the profit and loss statement on page 416.

POSTMASTER-GENERAL'S DEPARTMENT: CASH REVENUE, BY SOURCE CENTRAL OFFICE AND STATES, 1967-68

($'000)

Source	*Central Office*	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
Postal . . .	7,636	52,274	37,161	16,353	11,351	8,938	3,173	136,886
Telephone . . .	330	128,835	92,507	42,348	30,124	22,057	8,939	325,141
Telegraph . . .	2,279	8,023	5,009	3,585	2,688	2,159	568	24,310
Miscellaneous . .	..	61	72	22	27	..	178	360
Total . .	**10,246**	**189,192**	**134,750**	**62,308**	**44,190**	**33,154**	**12,858**	**486,697**

POSTMASTER-GENERAL'S DEPARTMENT: CASH REVENUE BY SOURCE, AUSTRALIA, 1963-64 TO 1967-68

($'000)

Source	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Postal	105,954	112,182	116,187	119,270	136,886
Telephone	205,564	240,641	264,560	289,120	325,141
Telegraph	17,254	19,352	20,429	21,796	24,310
Miscellaneous	506	473	320	505	360
Total	**329,278**	**372,648**	**401,496**	**430,690**	**486,697**

Cash expenditure, Postmaster-General's Department

The following tables show, as far as possible, the distribution of cash expenditure (actual payments during each year as recorded for Treasury purposes) in each State and Central Office. The tables must not be regarded as statements of the working expenses of the Department, since items relating to new works, etc., are included therein.

POSTMASTER-GENERAL'S DEPARTMENT: CASH EXPENDITURE CENTRAL OFFICE AND STATES, 1967-68

($'000)

	Central Office	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
Expenditure from ordinary services votes—								
Salaries and payments in the nature of a salary	3,144	59,710	41,769	22,831	14,770	10,737	5,016	157,976
Administrative	1,937	5,515	4,355	2,279	1,576	1,243	551	17,457
Stores and material	240	4,240	3,374	1,009	854	566	245	10,526
Mail services	17,689	4,661	2,732	2,155	1,098	663	285	29,284
Engineering services (other than new works)	4,528	44,005	30,036	15,151	10,772	8,505	3,936	116,934
Other services	385	..	..	..	..	..	..	385
Total, ordinary services votes	*27,923*	*118,132*	*82,267*	*43,425*	*29,069*	*21,714*	*10,034*	*332,563*
Rent, repairs, maintenance	..	2,963	3,514	917	734	512	207	8,847
Furniture and fittings	..	334	326	185	56	119	32	1,052
Capital works and services—								
Plant and equipment	3,005	84,030	55,292	23,764	18,581	22,762	7,157	214,591
Buildings, sites and properties	..	9,021	6,452	2,270	2,463	2,000	510	22,716
Grand total	**30,928**	**214,480**	**147,851**	**70,561**	**50,903**	**47,107**	**17,940**	**579,769**

POSTMASTER-GENERAL'S DEPARTMENT: CASH EXPENDITURE AUSTRALIA, 1963-64 TO 1967-68

($'000)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Expenditure from ordinary services votes—					
Salaries and payments in the nature of a salary	107,964	118,490	127,579	144,586	157,976
Administrative	14,588	16,380	18,986	15,848	17,457
Stores and material	3,308	3,455	4,629	9,742	10,526
Mail services	24,152	25,226	28,407	29,227	29,284
Engineering services (other than new works)	77,350	85,553	92,693	102,983	116,934
Other services	280	319	328	366	385
Total, ordinary services votes	*227,642*	*249,423*	*272,623*	*302,752*	*332,563*
Rent, repairs, maintenance	4,206	4,900	5,775	6,445	8,847
Furniture and fittings	..	..	(*a*)697	749	1,052
Capital works and services—					
Plant and equipment	122,406	144,802	164,682	190,490	214,591
Buildings, sites and properties	14,716	15,086	(*b*)14,471	14,588	22,716
Grand total	**368,970**	**414,211**	**458,248**	**515,024**	**579,769**

(*a*) Previously included in capital works. (*b*) Excludes expenditure on furniture and fittings, previously included with building expenditure.

Profit or loss, Postmaster-General's Department

The foregoing tables of cash revenue and expenditure represent actual collections and payments made, and cannot be taken to represent the actual financial results of the Department's operations for the year. The net results after providing for working expenses (including superannuation, furlough and depreciation) and interest charges (including exchange) are shown in the following table for the year 1967–68 together with summarised particulars for the year 1966–67.

POSTMASTER-GENERAL'S DEPARTMENT: CONSOLIDATED STATEMENT OF PROFIT AND LOSS, 1966-67 AND 1967-68

($'000)

	1967–68			*1966–67*
	Postal service	*Telecommunications service*	*All services*	*All services*
Earnings	*138,179*	*364,478*	*502,656*	*431,488*
Working expenses—				
Operating and general cost	103,158	92,614	195,772	177,343
Maintenance of plant and equipment	3,858	83,645	87,503	75,649
Carriage of mails	33,114	..	33,114	32,395
Depreciation	3,050	91,018	94,068	76,867
Superannuation and furlough liability	9,030	14,382	23,412	21,707
Total working expenses	*152,210*	*281,659*	*433,869*	*383,961*
Profit or loss before interest	−14,031	82,819	68,787	47,527
Interest	6,129	72,307	78,436	69,029
Profit or loss after interest	**−20,161**	**10,512**	**−9,648**	**−21,502**

Minus sign (—) denotes loss.

Fixed assets, Postmaster-General's Department

POSTMASTER-GENERAL'S DEPARTMENT: TRANSACTIONS AFFECTING FIXED ASSETS, 1967-68

($'000)

Class of plant	*Value at 1 July 1967*	*Adjustments to values*	*Additions during year*	*Instalments of plant written out*	*Value at 30 June 1968*
Telecommunications plant	1,732,591	−21,588	227,941	18,123	(*a*)1,920,821
Postal plant	14,785	..	1,467	49	16,204
Engineers' moveable plant	36,978	..	5,583	1,802	40,758
Motor vehicles	28,494	..	7,996	3,648	32,842
Other plant and equipment	35,637	..	4,145	1,014	38,768
Buildings	191,385	..	23,787	..	(*b*)215,173
Land	20,268	..	1,758	..	22,025
Total	**2,060,139**	**−21,588**	**272,676**	**24,635**	**2,286,591**

(*a*) Includes plant under construction valued at $97,308,644. (*b*) Includes buildings under construction valued at $15,307,687.

Minus sign (—) denotes reduction in values of assets.

Postal services

Mail delivery points

MAIL DELIVERY POINTS: STATES, 30 JUNE 1968

State	*Postmen's delivery*	*Roadside delivery*	*Private boxes*	*Private mail bag services*
New South Wales	1,321,828	57,514	76,867	6,383
Victoria	890,013	34,221	45,227	6,319
Queensland	438,350	29,445	37,683	4,757
South Australia	334,970	1,129	27,484	2,958
Western Australia	214,009	18,840	21,172	791
Tasmania	77,511	1,481	8,313	1,732
Australia	**3,276,681**	**142,630**	**216,746**	**22,940**

Postal articles handled

The following two tables show the number of postal articles handled by the Australian Post Office, according to their State of origin. Each article is counted once only irrespective of the number of times it may be handled in transit.

POSTAL ARTICLES HANDLED(*a*): STATES, 1967-68

('000)

State	*Letters (b)*	*Newspapers and packets (c)*	*Parcels (d)*	*Registered articles (e)*	*Letters (b)*	*Newspapers and packets (c)*	*Parcels (d)*	*Registered articles (e)*
	Posted for delivery within Australia				*Posted for delivery overseas*			
New South Wales	717,190	154,174	7,285	3,572	48,932	11,208	406	936
Victoria	580,820	100,854	5,531	2,385	29,506	4,504	249	553
Queensland	275,754	31,861	2,613	1,464	10,525	997	44	34
South Australia	168,072	17,739	1,533	766	8,603	1,587	64	62
Western Australia	159,093	13,252	1,158	667	7,333	995	42	78
Tasmania	53,132	8,066	277	342	571	74	10	3
Australia	**1,954,061**	**325,946**	**18,399**	**9,196**	**105,470**	**19,365**	**814**	**1,666**
	Received from overseas				*Total postal matter dealt with*			
New South Wales	66,164	36,387	711	1,296	832,286	201,769	8,402	5,803
Victoria	53,881	10,943	456	598	664,207	116,301	6,236	3,536
Queensland	7,764	4,971	168	64	294,043	37,829	2,825	1,562
South Australia	5,671	4,530	114	31	182,346	23,856	1,711	858
Western Australia	8,508	6,948	106	53	174,934	21,195	1,306	799
Tasmania	1,570	2,001	16	4	55,273	10,141	303	349
Australia	**143,558**	**65,780**	**1,571**	**2,046**	**2,203,089**	**411,091**	**20,783**	**12,908**

(*a*) Number of distinct articles handled. (*b*) Includes letters, cards and other postal articles enclosed in envelopes and sorted with letters. (*c*) Includes newspapers and postal articles not included in letter mail. (*d*) Includes registered, cash on delivery and duty parcels. (*e*) Includes registered articles other than parcels.

POSTAL ARTICLES HANDLED(*a*): AUSTRALIA, 1963-64 TO 1967-68
('000)

Year	Letters (*b*)	Newspapers and packets (*c*)	Parcels (*d*)	Registered articles (*e*)	Total postal articles handled
1963–64 .	1,952,029	360,510	17,010	12,315	2,341,864
1964–65 .	2,032,287	380,178	18,156	12,190	2,442,811
1965–66 .	2,123,338	401,578	18,327	12,886	2,556,128
1966–67 .	2,232,881	417,980	19,196	13,097	2,683,154
1967–68 .	2,203,089	411,091	20,783	12,908	2,647,871

(*a*) Number of distinct articles handled. (*b*) Includes letters, cards and other postal articles enclosed in envelopes and sorted with letters. (*c*) Includes newspapers and postal articles not included in letter mail. (*d*) Includes registered, cash on delivery and duty parcels. (*e*) Includes registered articles other than parcels.

During 1967–68 the cost of the carriage of mails, as disclosed by the Profit and Loss Account of the Postal Service, was as follows: road, $10,752,687; railway, $3,891,570; sea, $652,079; air—internal, $4,054,591, overseas, $13,763,146; total, $33,114,073.

Money orders and postal orders

The issue of money orders and postal orders is regulated by sections 74–9 of the *Post and Telegraph Act* 1901–1968. The maximum amount for which a single money order payable within Australia may be obtained is $80, but additional orders will be issued upon request when larger amounts are to be remitted. The maximum amount permitted to be sent by any one person to a person or persons outside Australia is $50 a week. A postal order is not available for a sum larger than eight dollars. The following table shows the number and value of money orders and postal orders issued in Australia in each of the years 1963-64 to 1967–68 and the income therefrom which has accrued to the Post Office.

MONEY ORDERS AND POSTAL ORDERS(*a*): TRANSACTIONS, AUSTRALIA 1963-64 TO 1967-68

Year	*Money orders(b)*			*Postal orders(a)*		
	Issued(c)		Total commission received	*Issued*		
	Number	Value		Number	Value	Fee
	'000	$'000	$'000	'000	$'000	$'000
1963–64 . .	11,838	338,674	2,004	15,987	17,234	634
1964–65 . .	12,176	376,356	2,103	15,338	16,737	618
1965–66 . .	12,634	407,275	2,200	15,010	16,184	604
1966–67 . .	12,594	434,942	2,332	13,499	18,454	629
1967–68 . .	11,373	438,668	2,544	12,364	22,149	657

(*a*) Postal orders replaced postal notes on 1 June 1966. (*b*) Money orders issued for payment in Australia and Papua and New Guinea. (*c*) Includes official money orders used in bringing to account telephone accounts and collections on War Service Homes repayments.

Of the total money orders issued in Australia during 1967–68, 10,922,513 valued at $435,224,030 were payable in Australia, and 450,011 valued at $3,444,244 were payable overseas. Of the total money orders paid in Australia during 1967–68, 11,365,949 ($435,185,608) were issued in Australia, and 202,190 ($3,433,777) were issued overseas.

Of the total postal orders paid in Australia during 1967–68 (12,681,165 valued at $21,809,219), 9,405,176 ($16,731,372) were paid in the State in which issued, and 3,275,989 ($5,077,846) were paid in States other than those in which issued.

Internal telecommunication services

A review of the development of telegraph services in Australia up to 1921 appeared in Year Book No. 15, page 625, and subsequent developments of importance have been dealt with in later issues. Internal telecommunication operations now comprise telephone, telegraph, and telegraph exchange (telex) services.

Wire and pole mileages

At 30 June 1968 there were 18,793,000 single wire miles of cable and 1,201,000 miles of aerial wire used for telecommunication purposes in Australia. The aerial wires are mounted on 114,203 miles of pole routes.

Coaxial cable and broadband relay systems

In recent years trunk telephone, telegraph and television channels have been increasingly provided by coaxial cable and radio relay systems. Broadband radio relay systems and coaxial cables are an alternative means of providing transmission facilities, each radio bearer being similar in carrying capacity to a coaxial tube. At 30 June 1968 there were 9,453 tube miles of coaxial cable and 24,804 bearer miles of radio relays in operation.

Telephone services in operation

The following table shows the number of services in operation in each State at 30 June 1968 classified according to type of service, type of exchange to which connected, and location. Telephone services connected to exchanges located within fifteen miles of the Sydney and Melbourne and ten miles of the Brisbane, Adelaide, Perth, and Hobart General Post Offices are defined as being within a metropolitan area.

TELEPHONE SERVICES IN OPERATION: STATES, 30 JUNE 1968

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
Type of service—							
Ordinary exchange services . . .	786,231	650,409	259,523	187,634	131,698	61,627	2,077,122
Duplex services . .	10,656	196	178	334	194	166	11,724
Party line services .	4,401	2,242	2,917	1,382	1,261	222	12,425
Private branch exchange services . . .	98,847	67,355	23,112	20,718	14,307	3,786	228,125
Public telephones .	11,309	7,373	4,616	2,774	2,202	1,167	29,441
Connected to—							
Automatic exchanges .	799,376	650,962	232,116	183,249	128,777	56,676	2,051,156
Manual exchanges .	112,068	76,613	58,230	29,593	20,885	10,292	307,681
Located in—							
Metropolitan areas .	572,604	480,962	139,445	137,348	101,451	24,369	1,456,179
Country areas . .	338,840	246,613	150,901	75,494	48,211	42,599	902,658
Total . . .	**911,444**	**727,575**	**290,346**	**212,842**	**149,662**	**66,968**	**2,358,837**

TELEPHONE SERVICES IN OPERATION: AUSTRALIA, 1964 TO 1968

	30 June—				
Services connected to—	*1964*	*1965*	*1966*	*1967*	*1968*
Metropolitan exchanges—					
Automatic	1,188,264	1,244,926	1,316,456	1,383,475	1,456,179
Country exchanges—					
Automatic	361,368	414,636	467,844	523,697	594,977
Manual	369,248	350,562	336,078	327,531	307,681
All exchanges—					
Automatic	1,549,632	1,659,562	1,784,300	1,907,172	2,051,156
Manual	369,248	350,562	336,078	327,531	307,681
Total services	**1,918,880**	**2,010,124**	**2,120,378**	**2,234,703**	**2,358,837**

Telephone instruments

TELEPHONE INSTRUMENTS IN SERVICE: STATES, 1964 TO 1968

('000)

30 June—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
1964	1,053	819	324	241	155	78	2,670
1965	1,107	861	341	256	164	82	2,811
1966	1,182	905	357	272	176	86	2,978
1967	1,276	958	377	287	191	89	3,178
1968	1,371	1,020	398	302	208	93	3,392
Number at 30 June 1968 per 100 population	30.5	30.6	23.0	25.5	22.9	24.3	28.2

Internal telephone traffic

LOCAL AND TRUNK LINE TELEPHONE CALLS: AUSTRALIA, 1963-64 TO 1967-68

	Effective paid local calls		*Trunk line calls*		
Year	*Total* '000	*Per service* *number*	*Total* '000	*Per service* *number*	*Total calls* '000
1963–64 . . .	1,958,000	1,020	95,700	50	2,053,700
1964–65 . . .	2,043,000	1,016	106,500	53	2,149,500
1965–66 . . .	2,103,000	992	116,600	55	2,219,600
1966–67 . . .	2,179,000	1,001	134,200	62	2,313,200
1967–68 . . .	2,295,000	999	151,600	66	2,446,600

Subscriber trunk dialling (S.T.D.) facilities were introduced during the year 1961–62 from Canberra to the Sydney network and from Warragul (Victoria) to Melbourne. At the end of June 1968 subscriber trunk dialling was in operation at 472 exchanges, connected to approximately 1,212,000 services.

Internal telegraphs

Telegrams can be lodged at any post office, telephone office or from any public telephone equipped for multi-coin operation. In addition, telegrams can be despatched from any subscriber's telephone or telegraph exchange (telex) equipment. The number of telegrams of various types transmitted within the Commonwealth during the years 1963–64 to 1967–68 is set out hereunder.

INTERNAL TELEGRAPH TRAFFIC: AUSTRALIA, 1963-64 TO 1967-68

('000)

Year	*Ordinary* (*a*)	*Urgent*	*Press*	*Letter-grams*	*Meteorological service*	*Service*	*Total telegrams*
1963–64 . . .	17,783	545	130	86	920	621	20,085
1964–65 . . .	18,302	532	96	65	912	643	20,550
1965–66 . . .	18,605	550	100	59	1,005	717	21,036
1966–67 . . .	19,019	494	78	47	1,014	719	21,372
1967–68 . . .	18,723	440	68	38	1,060	719	21,047

(*a*) Includes radiograms.

Teleprinter exchange service (telex)

Particulars of the operations of the teleprinter exchange network, which are additional to the telegraph traffic shown above, are given on page 421.

TELEPRINTER EXCHANGE NETWORK (TELEX) SERVICES AND INTERNAL CALLS, AUSTRALIA, 1962-63 TO 1967-68

Year	*Services at end of year*	*Internal calls during year*
1962–63 . . .	1,439	1,060,387
1963–64 . . .	1,815	1,492,024
1964–65 . . .	2,179	1,867,701
1965–66 . . .	2,444	2,161,353
1966–67 . . .	3,154	3,592,610
1967–68 . . .	4,054	5,435,413

Overseas telecommunication services

The Overseas Telecommunications Commission (Australia) is the authority responsible for the establishment, maintenance, operation and development of Australia's overseas public telegraph, phototelegraph and telex services by cable and by radio, and the provision, maintenance, and development of cable and radio facilities for the conduct of Australia's overseas telephone services and of the facilities for services with ships at sea.

The Commission was established under the *Overseas Telecommunications Act* 1946–1968. This Act implemented, in Australia, a recommendation of the 1945 Commonwealth Telecommunications Conference for national ownership of the external telecommunication services of the British Commonwealth countries concerned and for the establishment of a representative advisory board, the Commonwealth Telecommunications Board, to co-ordinate their development.

The Commission provides telegraph, telex, phototelegraph, and, in conjunction with the Postmaster-General's Department, telephone services with overseas countries and Australian Territories. Leased one and two-way circuits are also provided for large commercial users. In addition, it operates the Australian coastal radio services for communication with ships at sea in Australian waters and high frequency radio services for communication with ships in any part of the world. The Commission's coastal radio stations also provide certain services to a number of remote stations within Australia and its Territories.

Details of overseas communication systems operating in Australia prior to 1946 and developments leading to the establishment of the Commission were published in Year Book No. 37, pages 220–4.

To meet Australia's increasing demand for overseas communication channels, and because of limitations to performance and capacity inherent in current forms of telegraph cables and high frequency radio systems, the Commission, in partnership with the overseas telecommunications authorities of Britain, Canada, and New Zealand, installed a large capacity telephone cable across the Pacific Ocean, connecting Australia, New Zealand and Canada via Suva and Honolulu. The cable (COMPAC) was opened in December 1963 and forms part of a British Commonwealth large capacity cable scheme, in which a complementary cable between Britain and Canada (CANTAT) was officially opened in December 1961. The two cable connections are linked across Canada by a microwave system. The Commonwealth cable system feeds into the United States of America network at Hawaii and into the European network at London.

The last stage, the south-east Asia cable project (SEACOM), extends the large capacity telephone cable system from Sydney to Singapore and Kuala Lumpur via Cairns, Madang, Guam, Hong Kong, and Kota Kinabalu. It was opened for service on 30 March 1967.

The Commonwealth Cable Management Committee, comprising representatives of the partner Governments, Britain, Canada, Australia, New Zealand, Malaysia and Singapore, administers COMPAC and SEACOM.

In 1964 a number of countries, including Australia, agreed to establish a global commercial communications satellite system at an estimated cost, for the space segment, of $US200m. Broadly the term 'space segment' describes the orbiting satellites and the tracking, control, command, and related facilities required to support their operation. Australia, represented by the Commission, is one of the eighteen representatives on the Interim Communications Satellite Committee (ICSC) which is the management body of the sixty-three nation International Telecommunications Satellite Corporation (INTELSAT).

In March 1968 a satellite earth station at Moree, New South Wales, owned and operated by the Commission commenced commercial communications through an INTELSAT satellite launched in January 1967 and positioned in geostationary orbit 22,300 miles above the equator at longitude

175.5°E. This station is the first in Australia constructed as a 'standard' station of the INTELSAT network and currently carries circuits to destinations in the U.S.A., Canada and Great Britain by way of the new Jamesburg satellite earth station about 150 miles south of San Francisco.

The Commission's small aperture satellite earth station at Carnarvon, which provides a direct link between Western Australia and the U.S.A. for the National Aeronautics and Space Administration (NASA) completed its first year of operation during 1968.

Two additional satellite earth stations are currently under construction for the Commission, one at Ceduna, South Australia and the other at the present Carnarvon site. The Ceduna station will operate through an Indian Ocean INTELSAT III satellite to be launched in 1969 to similar stations in Britain, Europe and Asia while the second station at Carnarvon will work to a Pacific INTELSAT satellite. When this second station at Carnarvon becomes operational during 1969 it will replace the existing non-standard station which then will be utilised for tracking, telemetry and command functions for the INTELSAT III series of satellites. Both stations are scheduled for completion in the latter part of 1969.

During the year the Commission continued to play an active part in the work of the Interim Communications Satellite Committee and its sub-Committees.

International telecommunication traffic

Particulars of the volume of international telegram business, originating and terminating in Australia, transacted over the cable and radio services during the years ended 31 March 1967 and 1968 are shown in the following table.

INTERNATIONAL TELEGRAPHIC TRAFFIC: AUSTRALIA, YEARS ENDED 31 MARCH 1967 AND 1968

('000 words)

	Words transmitted—					
	From Australia		*To Australia*		*Total*	
Class of traffic	*1966–67*	*1967–68*	*1966–67*	*1967–68*	*1966–67*	*1967–68*
Letter	24,275	27,503	20,688	22,469	44,963	49,972
Ordinary	21,323	23,463	20,021	21,535	41,344	44,999
Press	5,157	4,350	4,850	4,079	10,008	8,429
Greetings	1,564	1,543	1,916	1,959	3,479	3,502
Urgent	1,138	1,315	1,040	1,158	2,179	2,472
Other	1,556	1,721	3,016	3,078	4,572	4,799
Total	**55,013**	**59,894**	**51,532**	**54,278**	**106,545**	**114,173**

The following table shows particulars of overseas telecommunication traffic other than telegraphic between Australia and overseas countries for the years ended 31 March 1967 and 1968.

INTERNATIONAL TELECOMMUNICATION TRAFFIC OTHER THAN TELEGRAPHIC AUSTRALIA, YEARS ENDED 31 MARCH 1967 AND 1968

		Transmissions					
		From Australia		*To Australia*		*Total*	
Service		*1966–67*	*1967–68*	*1966–67*	*1967–68*	*1966–67*	*1967–68*
Telephone	paid minutes	2,018,741	2,647,942	2,091,297	2,796,753	4,110,038	5,444,695
Telex	paid minutes	946,446	1,287,383	969,958	1,303,051	1,916,404	2,590,434
Phototelegrams	pictures	1,656	1,360	6,838	5,642	8,494	7,002

Coast stations

The Overseas Telecommunications Commission operates fifteen coastal radio stations at points around the Australian coast, three on the Papua-New Guinea coast, and one at Norfolk Island. During the year ended 31 March 1968 the coastal radio service handled 5,326,629 paid words to ships and 3,202,815 words from ships. Ship calls over the radiotelephone service extended over 62,780 paid minutes.

Radiocommunication stations authorised

The following table shows particulars of the different classes of radiocommunication stations authorised in Australia at 30 June 1968. Figures relate to radiocommunication (radio telegraph and radiotelephone) stations only; particulars of broadcasting stations and of broadcast listeners' licences are shown on pages 424 and 426 respectively.

RADIOCOMMUNICATION STATIONS AUTHORISED: STATES AND TERRITORIES
30 JUNE 1968

Class of station	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Transmitting and receiving—									
Fixed(*a*)—									
Aeronautical	11	4	18	5	17	8	8	1	72
Services with other countries—									
Overseas Telecommunications Commission	67	12	4	..	10	..	..	..	93
Outpost(*b*)	275	..	662	156	434	19	240	..	1,786
Other	365	223	176	81	242	57	48	4	1,196
Land(*c*)—									
Aeronautical	80	28	43	21	34	7	29	1	243
Base—									
Land mobile	2,420	1,527	1,208	683	693	319	51	146	7,047
Harbour mobile	35	22	25	10	39	13	..	..	144
Coast(*d*)	33	16	29	21	39	24	4	..	166
Special experimental	183	143	61	61	64	17	6	..	535
Mobile(*e*)—									
Aeronautical	712	449	416	212	381	26	42	6	2,244
Land mobile	25,098	17,795	11,171	8,109	6,332	2,588	556	827	72,476
Harbour mobile	267	163	142	54	186	75	..	..	887
Outpost	263	..	497	331	591	66	892	1	2,641
Ship	1,898	626	1,310	523	946	415	35	..	*f*5,928
Amateur	1,807	1,723	652	734	415	222	26	95	5,674
Total, transmitting and receiving	*33,514*	*22,731*	*16,414*	*11,001*	*10,423*	*3,856*	*1,937*	*1,081*	*f101,132*
Receiving only—									
Fixed(*a*)	146	198	88	..	57	..	..	..	489
Mobile	..	..	1	..	..	..	..	..	1
Total, receiving only	*146*	*198*	*89*	..	*57*	..	..	..	*490*
Grand total	**33,660**	**22,929**	**16,503**	**11,001**	**10,480**	**3,856**	**1,937**	**1,081**	***f*101,622**

(*a*) Stations established at fixed locations for communication with other stations similarly established. (*b*) Stations established in out-back areas for communication with control stations such as those of the Royal Flying Doctor Service. (*c*) Stations established at fixed locations for communication with mobile stations. (*d*) Land stations for communication with ocean-going vessels. (*e*) Equipment installed in aircraft (aeronautical), motor vehicles (land mobile services), harbour vessels (harbour mobile services) and ocean-going vessels (ships), and mobile equipment of organisations such as the Royal Flying Doctor Service. (*f*) Includes 175 stations which cannot be classified according to State or Territory.

BROADCASTING AND TELEVISION

Broadcasting and television services in Australia operate under the *Broadcasting and Television Act* 1942–1968 and comprise the National Broadcasting Service, the National Television Service, the Commercial Broadcasting Service, and the Commercial Television Service. General control of these services is a function of the Australian Broadcasting Control Board. Licence fees for commercial broadcasting and television stations are payable under the *Broadcasting Stations Licence Fees Act* 1964–1966 and the *Television Stations Licence Fees Act* 1964–1966 respectively.

Particulars of the composition, functions and responsibilities of the Australian Broadcasting Control Board are shown in Year Book No. 51, pages 594–5. The functions of the Board as shown therein were subsequently amended by repealing the Board's power to regulate the establishment and operation of networks. Pursuant to the *Broadcasting and Television Act* 1942–1968, the Australian Broadcasting Commission now consists of nine members, one of whom shall be a woman.

Broadcasting services

The National Broadcasting Service

In sound broadcasting the programmes of the National Broadcasting Service are provided by the Australian Broadcasting Commission through transmitters operated by the Postmaster-General's Department.

Technical facilities. At 30 June 1968 the National Broadcasting Service comprised seventy-nine transmitting stations, of which seventy-one were medium frequency and eight high frequency.

The medium-frequency transmitters operate in the broadcast band 525 to 1,605 kilocycles a second. The high-frequency stations, using frequencies within the band three to thirty megacycles a second, provide services to listeners in sparsely populated parts of Australia such as the north-west of Western Australia, the Northern Territory, and northern and central Queensland.

Many of the programmes provided by country stations are relayed from the capital cities, high-quality programme transmission lines being used for the purpose. A number of programme channels are utilised to link national broadcasting stations in the capital cities of Australia, and, when necessary, this system is extended to connect both the national and commercial broadcasting stations.

At 30 June 1968 fifty-nine of the Australian medium-frequency stations were situated outside the six State capital cities. Three additional country stations had been authorised but had not commenced to operate at 30 June 1968.

Programme facilities. The programmes of the Australian Broadcasting Commission cover a wide range of activities. The proportion of broadcasting time allocated to the various types of programme during 1967–68 was as follows: classical music, 25.4 per cent; entertainment, 28.6 per cent; news, 8.6 per cent; sporting, 5.0 per cent; light music, 2.5 per cent; talks, 7.2 per cent; drama and features, 3.6 per cent; education, 3.9 per cent; Parliament, 3.6 per cent; religious, 3.0 per cent; children's programmes, 2.5 per cent; rural, 2.5 per cent; and presentation, 3.6 per cent. Further particulars of the operations of the Australian Broadcasting Commission in respect of music, drama and features, youth education, talks, rural broadcasts, news, and other activities are shown in Year Book No. 51, pages 596–7.

The Commercial Broadcasting Service

Commercial broadcasting stations are operated under licences granted and renewed by the Postmaster-General after taking into consideration any recommendations which have been made by the Broadcasting Control Board. The initial period of a licence is five years and renewals are granted for a period of one year. The fee payable for a licence is $50 on the grant of the licence, and thereafter $50 a year plus an amount ascertained by applying the following rates to 'gross earnings', within the meaning of the *Broadcasting Stations Licence Fees Act* 1964–1966, during the preceding financial year—1 per cent up to $1,000,000; 2 per cent $1,000,001 to $2,000,000; 3 per cent $2,000,001 to $4,000,000; and 4 per cent over $4,000,000.

Overseas Broadcasting Service

There are seven high-frequency stations at Shepparton and two at Lyndhurst, Victoria, which provide the overseas service known as 'Radio Australia'. As in the case of the National Broadcasting Service, these stations are maintained and operated by the Postmaster-General's Department, and their programmes are arranged by the A.B.C. The programmes, which give news and information about Australia presented objectively, as well as entertainment, are directed mainly to south-east Asia and the Pacific. The overseas audience has grown very substantially in recent years, as evidenced by a large and increasing number of letters from listeners abroad.

Broadcasting stations

BROADCASTING STATIONS: STATES AND TERRITORIES, 30 JUNE 1968

Type of station	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
National—									
Medium frequency	19	5	16	8	13	4	4	2	71
High frequency	1	3	2	..	2	..	..	..	8
Overseas (high frequency)	..	9	..	..	..	..	..	..	9
Commercial (medium frequency)	37	20	25	8	14	8	1	1	114
Total	**57**	**37**	**43**	**16**	**29**	**12**	**5**	**3**	**202**

Tables showing the call sign, location, frequency, and aerial power of national and commercial broadcasting stations in operation at 30 June 1968 are shown in *Transport and Communication*, Bulletin No. 59.

Television services

The National Television Service

The National Television Service is provided by the Australian Broadcasting Commission through transmitters operated by the Postmaster-General's Department. The first national station (ABN Sydney) commenced regular transmissions on 5 November 1956. At 30 June 1968 thirty-nine stations were operating, excluding twelve translator stations. Five additional national television stations had been authorised but had not commenced to operate by that date.

The television programmes provided by the Australian Broadcasting Commission cover a wide range of activities. The proportion of television time allocated among the A.B.C.'s various departments to 30 June 1968 was as follows: drama, 25.1 per cent; talks, 12.2 per cent; sporting, 9.2 per cent; children's session, 14.1 per cent; news, 6.2 per cent; entertainment, 10.2 per cent; education, 14.1 per cent; music, 1.4 per cent; religious, 2.1 per cent; rural services, 1.5 per cent; presentation 3.9 per cent. Further particulars of the operation of the National Television Service in respect of talks, drama and features, music, rural services, education, news and other activities are shown in Year Book No. 51, pages 598–9. Transmission time for the year ended 30 June 1968 totalled 194,111 hours.

The Commercial Television Service

Commercial television stations are operated under licences granted and renewed by the Postmaster-General. The first commercial station (TCN Sydney) commenced regular transmission on 16 September 1956. At 30 June 1968 forty-two television stations were operating.

The initial grant of a licence is for a period of five years and thereafter the licence is renewable annually. The fee payable is $200 for the first year and thereafter $200 a year plus an amount ascertained by applying the following rates to 'gross earnings', within the meaning of the *Television Stations Licence Fees Act* 1964–1966, during the preceding financial year—1 per cent up to $1,000,000; 2 per cent $1,000,001 to $2,000,000; 3 per cent $2,000,001 to $4,000,000; and 4 per cent over $4,000,000.

Television stations

During the year ended 30 June 1968 the following national television station commenced regular transmissions: **Queensland**—ABMQ Channel 4, Mackay area. The following commerical television station also commenced regular transmissions during the year: **South Australia**—GTS Channel 4, Spencer Gulf North. Particulars of all television stations in operation at 31 December 1964 are shown in Year Book No. 51, pages 598–9. The following table shows the number of television stations in operation at 30 June 1968.

TELEVISION STATIONS: STATES AND AUSTRALIAN CAPITAL TERRITORY
30 JUNE 1968

Type of station and location	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*A.C.T.*	*Total*
National—								
Metropolitan . .	1	1	1	1	1	1	1	7
Country . . .	12	7	7	2	3	1	..	32
Total, National .	*13*	*8*	*8*	*3*	*4*	*2*	*1*	*39*
Commercial—								
Metropolitan . .	3	3	3	3	2	1	1	16
Country . . .	10	6	6	2	1	1	..	26
Total, Commercial .	*13*	*9*	*9*	*5*	*3*	*2*	*1*	*42*
All stations . .	**26**	**17**	**17**	**8**	**7**	**4**	**2**	**81**

Tables showing the call sign, location, frequencies, polarisation, aerial power, and weekly hours of transmission of National and Commercial television stations in operation at 30 June 1968 are shown in *Transport and Communication*, Bulletin No. 59.

Broadcast listeners' and television viewers' licences

Broadcast listeners', television viewers', and combined receiving licences are issued at post offices in accordance with the provisions of the *Broadcasting and Television Act* 1942–1968, which stipulates that, except as prescribed, a person shall not use, maintain or have in his possession a broadcast or television receiver unless there is in force a licence which applies to that receiver. A broadcast listener's licence or a television viewer's licence, whichever is appropriate, authorises the operation of any broadcast receiver or any television receiver, which is: (*a*) in the possession of the holder of a licence, or of a member of his family, at the address specified in the licence and is ordinarily kept at that address; (*b*) installed in a vehicle which is ordinarily in the possession of the holder, or a member of his family, and is ordinarily kept at that address when not in use. A person who has both broadcast and television receivers at the one address is required to take out a combined receiving licence, provision for which was introduced by legislation effective from 1 April 1965.

A licence may be granted free of charge to a blind person over 16 years of age or to a person or authority conducting a school, and at a concession rate to certain classes of pensioners. Receivers provided for the use of inmates of an approved institution (including a hospital) are covered by an appropriate licence held by the institution. Persons residing in Zone 2 may also be granted a broadcast listener's licence at a reduced rate. Zone 1 is the areas within 250 miles of specified broadcasting stations and Zone 2 is the remainder of Australia.

Each broadcast or television receiver let out on hire (except under a hire purchase agreement) must be covered by a hirer's licence held by the person or firm from whom the receiver is hired. The keeper of a lodging house (which includes a hotel, motel, boarding house, or any other premises where lodging or sleeping accommodation is provided for reward) must take out a lodging house licence for each broadcast or television receiver provided by the proprietor in any room or part of the lodging house occupied or available for occupation by lodgers.

The fees payable for the various classes of licence at 30 June 1968 were as follows:

BROADCAST LISTENERS' AND TELEVISION VIEWERS' LICENCES: RATES

Licence		*Ordinary rate*	*Pensioner rate*
		$	$
Broadcast listener's licence and hirer's licence for a broadcast receiver .	Zone 1	5.50	1.00
	Zone 2	2.80	0.70
Lodging house licence for a broadcast receiver	Zone 1	5.50	. .
	Zone 2	2.80	. .
Television viewer's licence and hirer's licence for a television receiver .	. .	12.00	3.00
Lodging house licence for a television receiver	. .	12.00	. .
Combined receiving licence	. .	17.00	4.00

Numbers of broadcast listeners' and television viewers' licences

BROADCAST LISTENERS' LICENCES IN FORCE(*a*): STATES, 1964 TO 1968

30 June—	*N.S.W.(b)*	*Vic.*	*Qld*	*S.A.(c)*	*W.A.*	*Tas.*	*Aust.*
1964	822,499	622,663	342,321	266,027	174,121	74,159	2,301,790
1965(*d*)	849,291	644,618	343,401	269,040	175,443	75,849	2,357,642
1966(*d*)	929,119	716,594	340,687	281,747	169,709	88,095	2,525,951
1967(*d*)	950,788	712,813	340,477	278,069	173,571	82,322	2,538,040
1968(*d*)	934,877	724,711	371,637	290,051	181,356	77,228	2,579,860

(*a*) Includes short-term hirers' licences. (*b*) Includes Australian Capital Territory. (*c*) Includes Northern Territory. (*d*) Includes combined broadcast listeners' and television viewers' licences.

TELEVISION VIEWERS' LICENCES IN FORCE(*a*): STATES, 1964 TO 1968

30 June—	*N.S.W.(b)*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
1964	721,043	581,286	214,763	194,430	115,272	55,305	1,882,099
1965(*c*)	787,507	620,996	243,660	208,642	123,741	60,079	2,044,625
1966(*c*)	843,103	662,595	277,182	233,726	142,881	66,187	2,225,674
1967(*c*)	927,038	690,857	302,575	254,504	159,048	71,113	2,405,135
1968(*c*)	948,153	726,518	335,913	268,595	165,632	74,581	2,519,392

(*a*) Includes short-term hirers' licences. (*b*) Includes Australian Capital Territory. (*c*) Includes combined broadcast listeners' and television viewers' licences.

The numbers of combined receiving licences included in both of the foregoing tables as at 30 June 1968 are: New South Wales, 780,549; Victoria, 629,729; Queensland, 268,043; South Australia, 215,851; Western Australia, 135,391; Tasmania, 63,049; Australia, 2,092,612.

Short-term hirers' licences (included above) at 30 June 1968 were: New South Wales, 69,665; Victoria, 26,152; Queensland, 28,072; South Australia, 34,279; Western Australia, 15,628; Tasmania, 4,064; and Australia, 177,860.

Revenue received from broadcast and television licence fees

The following table shows the revenue received from broadcast listeners' licence fees and television viewers' licence fees during the years 1963–64 to 1967–68. Figures for 1964–65 and later years include revenue from fees for combined licences which took effect on 1 April 1965.

REVENUE RECEIVED FROM BROADCAST AND TELEVISION LICENCE FEES STATES, 1963–64 TO 1967–68

($'000)

Year	*N.S.W.(a)*	*Vic.*	*Qld*	*S.A.(b)*	*W.A.*	*Tas.*	*Aust.*
1963–64	10,560	8,474	3,590	3,063	1,843	865	28,395
1964–65	12,400	9,811	4,230	3,586	2,124	1,006	33,157
1965–66	13,401	10,335	4,545	3,832	2,285	1,047	35,445
1966–67	14,244	10,840	4,951	4,101	2,571	1,127	37,835
1967–68	14,554	11,265	5,321	4,219	2,666	1,157	39,182

(*a*) Includes Australian Capital Territory. (*b*) Includes Northern Territory in respect of broadcast licence fees.

TRAVEL

An article outlining the history and growth of travel and the structure of tourist organisations in Australia, prepared by the Australian National Travel Association, appeared in Year Book No. 52, pages 1158–84. The following pages contain statistics of travel to and from Australia, together with some descriptive matter. Current statistics on overseas travel are published in monthly and quarterly (mimeographed) statements *Overseas Arrivals and Departures.*

Overseas travel

Statistics of overseas arrivals in, and departures from, Australia are classified into three categories, namely: *permanent movement* (i.e. settlers arriving and Australian residents departing permanently); *long-term movement* (i.e. Australian residents returning to Australia after a stay in a country abroad of one year or longer, or departing from Australia with the intention of staying in a country abroad for one year or more, and overseas visitors arriving with the intention of staying in Australia for a year or more or departing after a stay in Australia of a year or more); and *short-term movement* (i.e. all other movements). Statistics relating to permanent movement are included in Chapter 7, Population. The statistics presented in this section on travel relate mainly to overseas arrivals and departures of visitors and Australian residents classified as short-term, but, for completeness, statistics of those classified as long-term are also shown on pages 434–5 of this section.

Short-term movement, overseas visitors and Australian residents

Short-term refers basically to travellers (Australian residents and visitors from overseas), who intend to, or actually do, spend a period of less than twelve months in a country abroad or in Australia. This classification includes Australian troops, regardless of length of their stay abroad, and persons who come to Australia or go abroad for paid work or to study or for holidays or for other reasons (as long as their intended or actual length of stay is less than one year). It excludes visitors to Australia and residents on visits abroad if their stay in Australia or in a country abroad is one year or more, all crew, and persons who arrive in and depart from Australia on the same ship's voyage or on the same flight (variously called direct transit passengers or 'through' passengers) and passengers on short pleasure cruises in the South West Pacific commencing and finishing in Australia on ships not then engaged in regular voyages. However, it includes persons who, on arrival, declare their purpose of visiting Australia to be 'in transit', as long as a change of ship or flight takes place. Australian residents visiting abroad may be *away from Australia* for more than a year but still be included as short-term as long as their *stay in any one country abroad* is not for a year or more. As from October 1967, when United States troops commenced coming to Australia on rest and recreation leave, their movements have also been included with short-term travellers. For statistical purposes they are classified as short-term visitors travelling by air for holiday purposes and their country of residence and country of embarkation or disembarkation is shown as 'Asia—other'. During the period October 1967 to December 1968, 69,942 United States troops arrived in Australia on rest and recreation leave.

OVERSEAS VISITORS ARRIVING IN AND DEPARTING FROM AUSTRALIA, BY MODE OF TRANSPORT, 1964 TO 1968

SHORT-TERM

	Arriving			*Departing*		
Year	*By sea*	*By air*	*Total*	*By sea*	*By air*	*Total*
1964	18,916	128,962	147,878	22,147	128,494	150,641
1965	20,291	153,037	173,328	24,491	154,442	178,933
1966	19,547	167,715	187,262	25,541	169,335	194,876
1967	19,141	202,680	221,821	24,803	206,959	231,762
1968	18,575	281,314	299,889	24,521	286,660	311,181

Over the period covered by this table departures exceeded arrivals substantially. The reason lies broadly in the difference between the period of intended stay, as stated on the arrival of the visitor, and the period actually spent in Australia, as stated on his departure, resulting in a different classification on arrival from that on departure.

The following table shows corresponding figures in respect of Australian residents on visits abroad.

AUSTRALIAN RESIDENTS DEPARTING FROM AND RETURNING TO AUSTRALIA, BY MODE OF TRANSPORT, 1964 TO 1968

SHORT-TERM

	Departing			*Returning*		
Year	*By sea*	*By air*	*Total*	*By sea*	*By air*	*Total*
1964	43,785	89,463	133,248	36,430	94,924	131,354
1965	51,138	110,554	161,692	43,382	117,162	160,544
1966	54,348	128,813	183,161	46,024	135,746	181,770
1967	52,979	164,767	217,746	48,539	174,499	223,038
1968	47,928	203,952	251,880	40,732	212,041	252,773

In the next table short-term visitors arriving in, and Australian residents departing from, Australia are shown by countries of embarkation and disembarkation respectively. Country of embarkation refers to the country in which the passenger embarked on the particular ship or aircraft which brought him to Australia and country of disembarkation refers to the intended country of disembarkation from the particular ship or aircraft which took the passenger from Australia. Thus, these statistics do not necessarily indicate the country of origin of visitors nor the country of destination of residents going abroad.

OVERSEAS VISITORS ARRIVING—SHORT-TERM: AUSTRALIA

1958 TO 1968

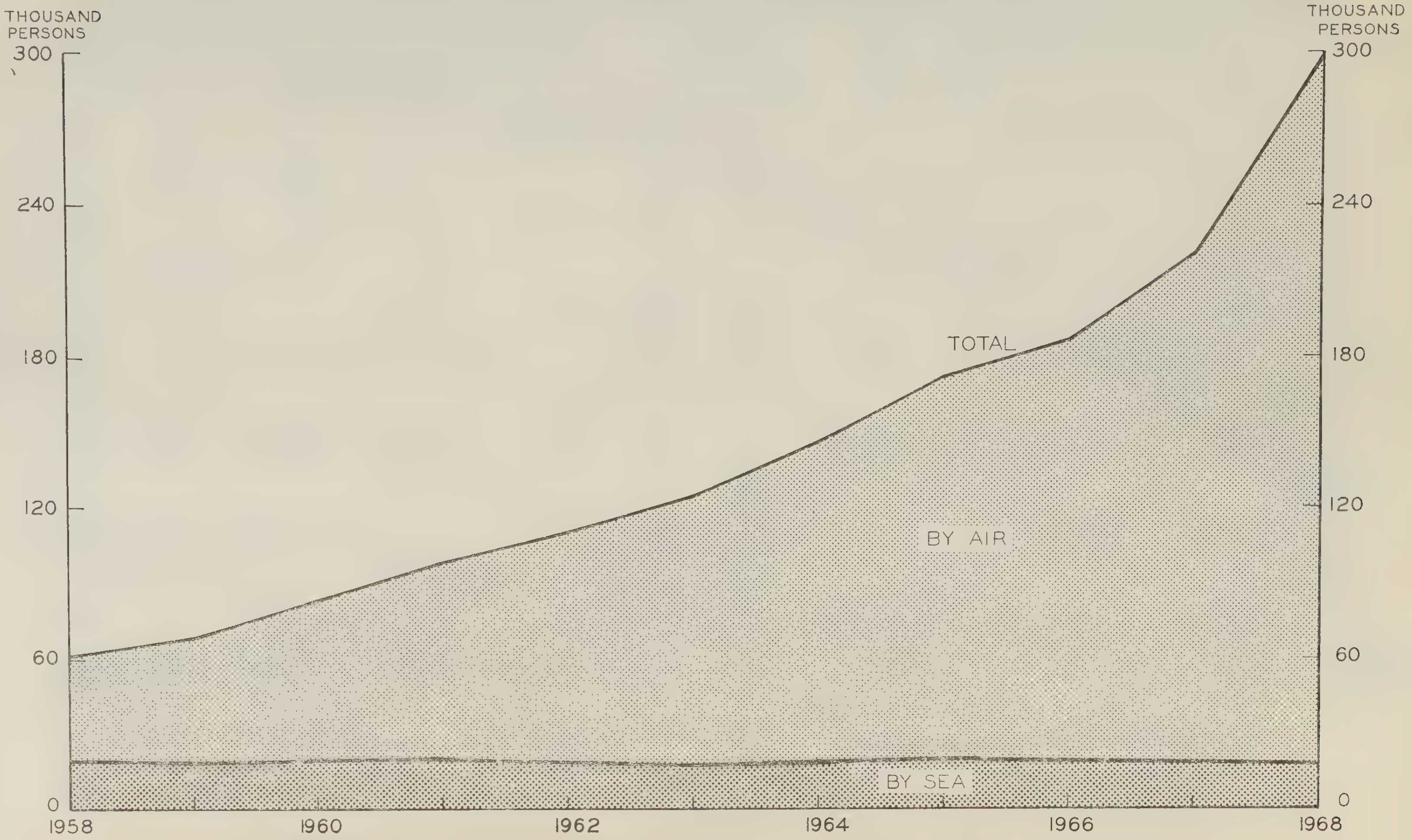
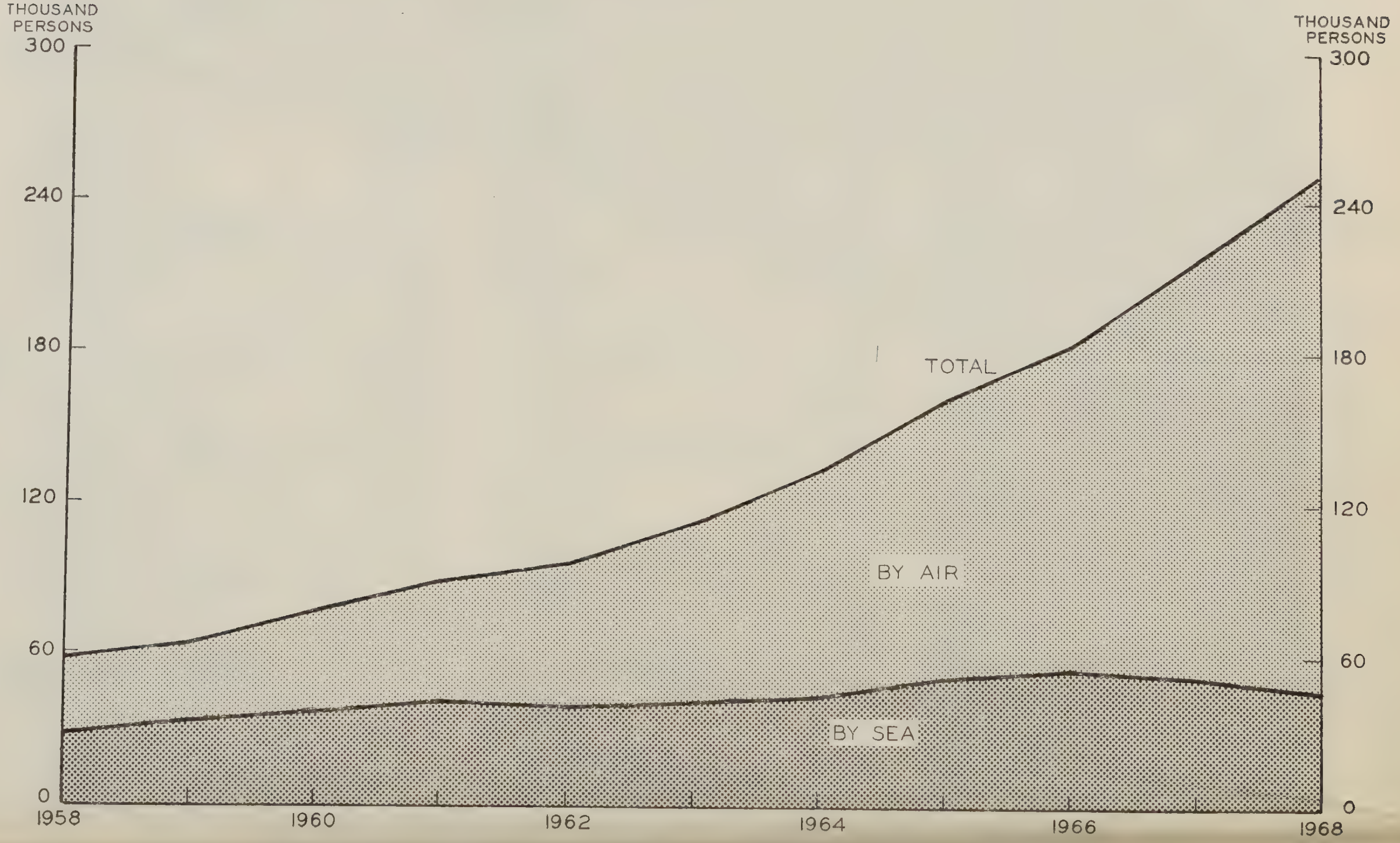


PLATE 31

PLATE 32

AUSTRALIAN RESIDENTS DEPARTING—SHORT-TERM: AUSTRALIA

1958 TO 1968



OVERSEAS VISITORS ARRIVING, BY COUNTRY OF EMBARKATION AND AUSTRALIAN RESIDENTS DEPARTING, BY COUNTRY OF DISEMBARKATION BY MODE OF TRANSPORT: AUSTRALIA, 1968

SHORT-TERM

Country of embarkation or disembarkation	*Overseas visitors arriving*			*Australian residents departing*		
	By sea	*By air*	*Total*	*By sea*	*By air*	*Total*
Africa	773	4,855	5,628	738	2,375	3,113
America—						
United States of America .	1,322	18,413	19,735	1,588	17,770	19,358
Other	734	1,168	1,902	1,698	1,550	3,248
Asia—						
Hong Kong . . .	521	12,315	12,836	859	11,344	12,203
Malaysia and Singapore .	2,874	21,015	23,889	4,277	19,266	23,543
Other	1,028	80,090	81,118	8,937	24,545	33,482
Europe—						
United Kingdom and Ireland	4,831	8,665	13,496	12,826	6,839	19,665
Other	1,438	6,502	7,940	9,036	17,199	26,235
Oceania—						
New Zealand . . .	3,741	88,257	91,998	5,689	59,898	65,587
Papua and New Guinea .	419	23,467	23,886	553	17,383	17,936
Other	894	16,567	17,461	1,727	25,783	27,510
Total . . .	**18,575**	**281,314**	**299,889**	**47,928**	**203,952**	**251,880**

For visitors arriving information is also available of their country of residence (i.e. in which they last stayed for one year or more). No information is available regarding the country in which Australian residents going abroad in the short-term movement intend to spend most time.

OVERSEAS VISITORS ARRIVING, BY COUNTRY OF RESIDENCE(*a*) AND MODE OF TRANSPORT: AUSTRALIA, 1968

SHORT-TERM

Country of residence(*a*)	*By sea*	*By air*	*Total*
Africa—			
Commonwealth countries . . .	245	1,493	1,738
South Africa	413	2,250	2,663
Other	18	495	513
America—			
Canada	858	5,241	6,099
Other Commonwealth countries . .	25	400	425
United States of America . . .	1,638	37,805	39,443
Other	33	1,018	1,051
Asia—			
Ceylon, India and Pakistan . .	61	2,374	2,435
Hong Kong	363	3,398	3,761
Malaysia and Singapore . . .	2,692	7,957	10,649
Other Commonwealth countries . .	30	142	172
Japan	280	6,490	6,770
Other	131	71,400	71,531
Europe—			
United Kingdom and Ireland . .	4,947	23,988	28,935
Other Commonwealth countries . .	48	241	289
France	84	2,127	2,211
Germany	245	2,986	3,231
Greece	87	465	552
Italy	171	1,849	2,020

(*a*) Country in which the visitor was last resident for a period of one year or more.

OVERSEAS VISITORS ARRIVING, BY COUNTRY OF RESIDENCE(*a*) AND MODE OF TRANSPORT: AUSTRALIA, 1968—*continued*

SHORT-TERM

Country of residence(*a*)	*By sea*	*By air*	*Total*
Europe—*continued*			
Netherlands	572	2,841	3,413
Switzerland	72	1,065	1,137
Other	221	3,664	3,885
Oceania—			
Fiji	171	2,975	3,146
New Zealand	3,798	69,804	73,602
Papua and New Guinea	628	21,684	22,312
Other Commonwealth countries	589	1,597	2,186
Other	155	5,565	5,720
Total	**18,575**	**281,314**	**299,889**

(*a*) Country in which the visitor was last resident for a period of one year or more.

The intended length of stay of visitors in Australia and of Australian residents abroad is related to the purpose of the journey in the following tables.

OVERSEAS VISITORS ARRIVING, BY INTENDED LENGTH OF STAY AND STATED PURPOSE OF JOURNEY: AUSTRALIA, 1968

SHORT-TERM

Intended length of stay	*In transit* (*a*)	*Business*	*Holiday*	*Education*	*Other and not stated*	*Total*
Under 1 week	26,284	9,668	76,007	304	1,743	114,006
1 week and under 2 weeks	2,631	11,731	21,177	553	2,454	38,546
2 weeks and under 3 weeks	1,112	9,040	21,914	721	2,390	35,177
3 weeks and under 1 month	309	3,357	16,175	288	2,459	22,588
1 month and under 2 months	586	5,216	20,913	481	1,723	28,919
2 months and under 3 months	..	1,882	11,334	454	1,135	14,805
3 months and under 4 months	..	1,488	10,128	1,489	1,187	14,292
4 months and under 6 months	..	738	3,709	453	597	5,497
6 months and under 12 months	..	1,451	6,259	3,442	1,742	12,894
Indefinite, not stated, etc.	6,750	999	3,210	618	1,588	13,165
Total	**37,672**	**45,570**	**190,826**	**8,803**	**17,018**	**299,889**

(*a*) Visitors who stated 'in transit' as the purpose of their journey to Australia and whose intended length of stay did not exceed one month. Excludes passengers passing through Australia without change of ship or aircraft.

AUSTRALIAN RESIDENTS DEPARTING, BY INTENDED LENGTH OF STAY AND STATED PURPOSE OF JOURNEY: AUSTRALIA, 1968

SHORT-TERM

Intended length of stay	*Business*	*Holiday*	*Education*	*Other and not stated*	*Total*
Under 1 week	6,790	2,953	233	595	10,571
1 week and under 2 weeks	8,207	16,419	636	963	26,225
2 weeks and under 3 weeks	6,382	29,073	688	1,071	37,214
3 weeks and under 1 month	3,892	24,690	343	770	29,695
1 month and under 2 months	9,000	27,433	544	1,401	38,378
2 months and under 3 months	5,539	17,803	445	936	24,723
3 months and under 4 months	3,129	14,202	368	976	18,675
4 months and under 6 months	1,360	9,795	171	542	11,868
6 months and under 12 months	2,203	20,416	640	2,059	25,318
Indefinite, not stated, etc.	1,364	8,740	304	18,805	29,213
Total	**47,866**	**171,524**	**4,372**	**28,118**	**251,880**

The intended length of stay of visitors from different countries is shown in the next table.

OVERSEAS VISITORS ARRIVING, BY COUNTRY OF RESIDENCE(a) AND INTENDED LENGTH OF STAY: AUSTRALIA, 1968

SHORT-TERM

Country of residence(a)	*Intended length of stay* Under 1 week	1 and under 2 weeks	2 and under 3 weeks	3 weeks and under 1 month	1 and under 2 months	2 and under 3 months	3 and under 4 months	4 and under 6 months	6 and under 12 months	Indefinite, not stated, etc.	Total
Africa	1,457	518	483	260	748	371	332	164	247	334	4,914
America—											
United States of America	9,896	10,925	6,191	3,079	3,935	1,559	1,089	513	1,250	1,006	39,443
Other	1,130	1,272	1,131	742	1,127	563	410	282	527	391	7,575
Asia—											
Hong Kong	961	514	381	200	492	260	321	68	229	335	3,761
Malaysia and Singapore	1,800	1,331	1,536	2,014	1,029	455	399	164	1,152	769	10,649
Other	68,003	3,010	2,507	689	2,563	901	1,006	292	745	1,192	80,908
Europe—											
United Kingdom and Ireland	5,131	3,173	3,233	2,133	4,950	2,676	2,172	1,153	2,285	2,029	28,935
Other	4,109	1,889	1,714	501	1,839	1,285	1,801	711	1,454	1,435	16,738
Oceania—											
New Zealand	16,401	13,001	15,324	11,412	5,850	2,218	1,742	820	2,585	4,249	73,602
Papua and New Guinea	2,826	1,815	1,502	939	4,411	3,290	3,861	1,065	1,892	711	22,312
Other	2,292	1,098	1,175	619	1,975	1,227	1,159	265	528	714	11,052
Total	114,006	38,546	35,177	22,588	28,919	14,805	14,292	5,497	12,894	13,165	299,889

(a) The country in which the visitor was last resident for a period of one year or more.

The seasonal pattern of overseas short-term travel to and from Australia is shown in the next table which provides monthly figures of arrivals and departures during 1968.

OVERSEAS VISITORS AND AUSTRALIAN RESIDENTS: ARRIVALS AND DEPARTURES BY MONTH OF ARRIVAL OR DEPARTURE AND MODE OF TRANSPORT AUSTRALIA, 1968

SHORT-TERM

	Overseas visitors						*Australian residents*					
	Arriving			*Departing*			*Departing*			*Returning*		
Month	By sea	By air	Total	By sea	By air	Total	By sea	By air	Total	By sea	By air	Total
January	1,617	22,255	23,872	3,018	28,607	31,625	4,613	15,153	19,766	2,986	27,063	30,049
February	1,569	22,564	24,133	2,477	23,317	25,794	4,587	12,138	16,725	2,872	17,687	20,559
March	1,657	22,787	24,444	2,133	24,177	26,310	6,127	16,231	22,358	2,935	15,525	18,460
April	926	20,555	21,481	2,020	21,719	23,739	4,462	17,307	21,769	2,591	14,176	16,767
May	1,143	21,043	22,186	1,810	23,425	25,235	4,863	19,247	24,110	3,206	16,223	19,429
June	760	18,409	19,169	1,785	19,847	21,632	4,406	18,511	22,917	4,306	14,079	18,385
July	1,059	18,761	19,820	1,040	18,072	19,112	2,222	15,345	17,567	2,145	15,805	17,950
August	813	23,980	24,793	1,458	23,799	25,257	3,134	18,308	21,442	2,682	19,584	22,266
September	1,106	20,813	21,919	1,517	22,390	23,907	2,331	13,089	15,420	3,229	22,892	26,121
October	3,902	26,349	30,251	3,984	25,295	29,279	3,821	13,280	17,101	4,971	18,705	23,676
November	1,776	28,423	30,199	1,947	28,145	30,092	3,696	13,076	16,772	4,957	16,119	21,076
December	2,247	35,375	37,622	1,332	27,867	29,199	3,666	32,267	35,933	3,852	14,183	18,035
Total	18,575	281,314	299,889	24,521	286,660	311,181	47,928	203,952	251,880	40,732	212,041	252,773

The sex, marital status and age of short-term travellers to and from Australia are shown in the next table.

OVERSEAS VISITORS ARRIVING AND AUSTRALIAN RESIDENTS DEPARTING BY SEX, MARITAL STATUS AND AGE: AUSTRALIA, 1968

SHORT-TERM

Characteristics	*Overseas visitors arriving*			*Australian residents departing*		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*
Marital status—						
Never married . . .	92,323	33,870	126,193	49,996	38,526	88,522
Married	105,881	51,413	157,294	89,939	57,051	146,990
Widowed or divorced .	5,125	11,277	16,402	4,391	11,977	16,368
Age (years)—						
9 and under . . .	7,368	7,098	14,466	7,159	6,914	14,073
10 to 19	13,113	8,716	21,829	9,864	10,346	20,210
20 to 49	144,741	45,714	190,455	90,509	54,051	144,560
50 and over . . .	38,107	35,032	73,139	36,794	36,243	73,037
Total . . .	**203,329**	**96,560**	**299,889**	**144,326**	**107,554**	**251,880**

Long-term movement, overseas visitors and Australian residents

In addition to those arrivals and departures of overseas visitors and the overseas travel of Australian residents classified as short-term, there is similar travel classified as 'long-term movement' (*see* explanation on page 427). Particulars of this travel, where the stay in Australia (for overseas visitors) or in a country abroad (for Australian residents) is for a year or more are given below.

The following two tables show the stated purpose of journey of overseas visitors to Australia and of Australian residents visiting abroad from 1964 to 1968 who were classified as long-term travellers. When comparing the numbers of arrivals and departures, changes in classification due to the factor mentioned on page 427 must be kept in mind.

OVERSEAS VISITORS ARRIVING, BY STATED PURPOSE OF JOURNEY, AND OVERSEAS VISITORS DEPARTING: AUSTRALIA, 1964 TO 1968

LONG-TERM

Year	*Arriving*					*Departing*
	Business	*Holiday*	*Education*	*Other and not stated*	*Total*	
1964	3,545	3,836	3,014	4,625	15,020	13,085
1965	4,403	4,328	3,220	5,546	17,497	12,429
1966	4,279	5,052	3,517	6,386	19,234	11,999
1967	3,647	5,703	3,740	8,547	21,637	12,801
1968	4,002	6,139	3,732	9,600	23,473	12,617

AUSTRALIAN RESIDENTS DEPARTING, BY STATED PURPOSE OF JOURNEY, AND AUSTRALIAN RESIDENTS RETURNING: AUSTRALIA, 1964 TO 1968

LONG-TERM

Year	*Departing*					*Returning*
	Business	*Holiday*	*Education*	*Other and not stated*	*Total*	
1964	5,383	23,856	2,204	9,515	40,958	23,641
1965	7,032	24,167	2,494	12,620	46,313	26,260
1966	8,951	27,449	3,168	14,753	54,321	28,292
1967	9,221	25,400	3,361	14,166	52,148	35,655
1968	8,559	27,198	3,470	12,159	51,386	36,387

In the next table overseas visitors arriving and Australian residents departing, long-term, are classified by country of their last residence or intended future residence, i.e. the country in which they last resided or intended to reside next for one year or more.

OVERSEAS VISITORS ARRIVING, BY COUNTRY OF LAST RESIDENCE, AND AUSTRALIAN RESIDENTS DEPARTING, BY COUNTRY OF INTENDED RESIDENCE BY MODE OF TRANSPORT: AUSTRALIA, 1968

LONG-TERM

Country of residence(a)	Overseas visitors arriving			Australian residents departing		
	By sea	By air	Total	By sea	By air	Total
Africa	243	430	673	501	363	864
America—						
Canada	360	551	911	1,219	972	2,191
United States of America	284	2,769	3,053	754	1,917	2,671
Other	17	150	167	121	155	276
Asia—						
Hong Kong	49	316	365	64	433	497
Malaysia	15	991	1,006	42	1,399	1,441
Singapore	25	313	338	69	562	631
Japan	30	547	577	64	120	184
Other	59	1,618	1,677	355	1,537	1,892
Europe—						
United Kingdom and Ireland	1,416	1,686	3,102	9,756	3,810	13,566
Germany	77	216	293	1,187	430	1,617
Greece	85	151	236	3,482	1,533	5,015
Italy	60	335	395	4,830	1,203	6,033
Netherlands	133	127	260	843	199	1,042
Other	171	663	834	2,863	936	3,799
Oceania—						
Fiji	13	97	110	38	342	380
New Zealand	2,321	6,561	8,882	867	1,856	2,723
Papua and New Guinea	17	377	394	84	5,783	5,867
Other	27	173	200	266	431	697
Total	**5,402**	**18,071**	**23,473**	**27,405**	**23,981**	**51,386**

(a) Country in which the overseas visitor resided last, or the Australian resident intended to reside next, for one year or more.

The occupations of travellers to and from Australia who have been classified as long-term are shown in the next table.

OVERSEAS VISITORS ARRIVING AND AUSTRALIAN RESIDENTS DEPARTING, BY OCCUPATION AND SEX: AUSTRALIA, 1968

LONG-TERM

Occupation group	Overseas visitors arriving			Australian residents departing		
	Males	Females	Persons	Males	Females	Persons
Professional, technical, and related workers	1,766	1,309	3,075	4,145	4,214	8,359
Administrative, executive, and managerial workers	889	96	985	1,097	148	1,245
Clerical workers	480	1,574	2,054	1,749	4,423	6,172
Sales workers	609	199	808	821	463	1,284
Farmers, fishermen, hunters, timber getters, and related workers	575	30	605	538	19	557
Miners, quarrymen, and related workers	138	..	138	216	..	216
Workers in transport and communication	583	89	672	702	189	891
Craftsmen and production-process workers	3,099	226	3,325	4,722	763	5,485
Labourers	480	..	480	3,371	..	3,371
Service (protective and other), sport, and recreation workers	566	440	1,006	727	863	1,590
Occupations inadequately described or not stated	490	116	606	547	101	648
Persons not in the work force—						
Children and students	3,603	2,773	6,376	6,464	6,070	12,534
Others	314	3,029	3,343	535	8,499	9,034
Total	**13,592**	**9,881**	**23,473**	**25,634**	**25,752**	**51,386**

Direct transit travellers

As indicated on page 428, all the preceding figures in this section exclude persons who arrive in and depart from Australia on the same ship's journey or on the same flight. Persons thus excluded are not all normally considered visitors to Australia. For instance, settlers or other persons going to New Zealand, Papua and New Guinea, or other neighbouring countries, or leaving such countries may travel through Australia on their way. On the other hand, all persons visiting Australia on cruise vessels, which may remain in Australian waters for a considerable time, are also treated as direct transit travellers and are thus excluded from the figures shown on previous pages. Information regarding direct transit passengers on ships calling at Australian ports is given in the next table.

OVERSEAS SHIPPING PASSENGERS IN DIRECT TRANSIT(a) AUSTRALIA, 1967 AND 1968

	1967		*1968*	
Approximate period from first to last Australian port (days)	*Passengers*	*Passenger days*	*Passengers*	*Passenger days*
Less than 3	571	647	2,503	3,538
3 and less than 5	8,017	27,025	6,376	20,377
5 and less than 7	3,961	23,541	3,914	23,300
7 and less than 9	9,920	70,085	7,179	54,128
9 and less than 11	7,590	70,951	5,850	54,463
11 and less than 22	987	13,941	381	6,398
22 and over	181	5,406	212	6,408
Total	**31,227**	**211,596**	**26,415**	**168,612**

(a) Persons who arrived in and departed from Australia on the same ship's voyage.

Sea cruises from Australia

Excluded from the foregoing tables are passengers on short pleasure cruises in the south-west Pacific, commencing and finishing in Australia on ships not then engaged in regular voyages. During 1968 thirty-three such cruises, carrying 32,154 passengers, were completed.

Tourist organisation

The Australian Tourist Commission was established by the Commonwealth Government under the *Australian Tourist Commission Act* 1967. Its objectives are the encouragement of visits to Australia, and travel in Australia by people from other countries. The seven man Commission comprises a Chairman appointed by the Commonwealth Government; two appointees to represent private industry, selected by the Commonwealth Government from a panel of names put forward by the Australian National Travel Association; and two non-voting representatives nominated by the State Governments. Of the remaining two voting members at least one is an officer of the Public Service of the Commonwealth.

For 1968–69 the Commonwealth Government provided $1,750,000 to the Commission, to be spent on advertising campaigns and in associated promotional activities in overseas countries, particularly in New Zealand, North America, the United Kingdom, and Western Europe. The Commission brings to Australia travel agents, writers, photographers and other publicists to see at first hand what the country has to offer visitors. It takes no part in the detailed organisation of tourist activities in Australia. It has its Head Office in Melbourne and branch offices in London, New York, San Francisco, Los Angeles, Auckland, Tokyo and Sydney.

The Australian National Travel Association, which is described on pages 1161–2 of the special article Travel and Tourism in Year Book No. 52, was formerly responsible, *inter alia*, for the promotion overseas of Australia as a tourist destination. Following the creation of the Australian Tourist Commission, the Association now concentrates on the encouragement of the growth and development of travel and tourism within Australia, and the improvement of the standard and variety of facilities and services provided by private enterprise for the use of overseas visitors. It acts as a co-ordinating body for its members, provides a clearing house for information, and conducts surveys into aspects of local tourist activity. The Association is governed by a Board representative of travel and tourist interests. The Commonwealth Government is no longer represented on the Board. The Association's office is now located in Sydney.

CHAPTER 13

WELFARE SERVICES

This chapter relates to welfare services other than those concerned specifically with education, health and repatriation. The latter are dealt with, in the main, in the relevant chapters of this Year Book. Apart from a summary of government expenditure on welfare services and short descriptions of certain interstate organisations providing welfare services, the chapter is devoted to a description in some detail of the services provided by the Commonwealth. For information on the many important welfare services provided by State and local governments, especially in the fields of child and Aboriginal welfare, reference should be made to the Year Books or Statistical Registers of the States and the annual reports of the State departments concerned. Information on pension and superannuation schemes provided for government and semi-government employees, mine workers, parliamentarians, and employees of private business is included in the chapter Private Finance.

In addition, there are numerous services of this nature provided by charitable and other non-government institutions and organisations. There are institutions providing shelter and caring for needy, aged, infirm or handicapped persons, neglected children, destitute persons, wayward boys and girls, and the like. Many organisations, too, provide aid in kind (food, clothing, etc.), auxiliary medical and nursing services, and other assistance to relieve suffering and hardship. Considerable work is also done by such organisations in the rehabilitation or establishment in the community of various types of people, such as prisoners and migrants, and in the prevention and alleviation of cruelty and maltreatment of any sort. Comprehensive information regarding the activities of such organisations is not available.

Further information on subjects dealt with in this chapter is included in the annual bulletins *Australian National Accounts*, *Commonwealth Finance*, and *State, Territory and Local Government Authorities' Finance and Government Securities*. Current and summarised information on Commonwealth social services is contained in the *Quarterly Summary of Australian Statistics* and the *Monthly Review of Business Statistics.*

Expenditure on welfare services

This section deals with various government payments for the relief of the aged, indigent, infirm, widowed and unemployed, assistance to families, Aboriginal welfare, etc. For summary statements of cash payments to persons made by public authorities under various functional heads, *see Australian National Accounts* and the other annual bulletins mentioned above.

Commonwealth expenditure on welfare services

Information concerning the cost of administering each Commonwealth benefit separately is not compiled. However, the chapter Public Finance, and, in more detail, the annual bulletin *Commonwealth Finance*, present an analysis of Commonwealth expenditure by function and economic type, from which some estimates of administrative costs can be derived. Commonwealth expenditure on Aboriginal welfare is included on page 440 and that on grants for the construction of homes for the aged and for accommodation for disabled persons on pages 454 and 455 respectively.

The National Welfare Fund

The National Welfare Fund was established by the *National Welfare Fund Act* 1943 to finance a scheme of national welfare and has operated from 1 July 1943. The Principal Act was amended by the *National Welfare Fund Act* 1952. At the Fund's commencement it was used to finance funeral benefits and maternity allowances, but other social and health benefits were made a charge on the fund from time to time, and at present expenditure on all benefits except repatriation, telephone rental concessions and a few minor social and health benefits is met from the fund. The fund is used only to finance the benefits themselves; it is not used to finance the cost of administering the benefits, or of capital works associated with the benefits. Since the contributions to the fund from Consolidated Revenue equal expenditure from the fund, the balances in the fund grow each year by the interest on investment of these balances.

NATIONAL WELFARE FUND: RECEIPTS, EXPENDITURE, AND BALANCES 1963-64 TO 1967-68

($'000)

Year	*Income*				
	Contribution from Consolidated Revenue	*Interest on investments*	*Total*	*Expenditure*	*Balance in fund at end of year*
1963–64	832,696	4,157	836,853	832,696	418,382
1964–65	890,366	4,199	894,564	890,366	422,581
1965–66	941,574	4,241	945,815	941,574	426,822
1966–67	1,031,117	4,284	1,035,401	1,031,117	431,106
1967–68	1,075,049	4,327	1,079,376	1,075,049	435,433

COMMONWEALTH EXPENDITURE FROM NATIONAL WELFARE FUND STATES, TERRITORIES, ETC., 1967-68

($'000)

Service, etc.	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T. (a)*	*A.C.T. (a)*	*Abroad*	*Total*
Social services—										
Age and invalid pensions	200,962	129,334	82,210	46,711	36,418	15,414	1,336	1,111	488	513,984
Widows' pensions	22,745	15,807	9,564	5,937	4,346	2,125	217	249	71	61,061
Funeral benefits	500	362	210	134	90	39	..	3	..	1,338
Maternity allowances	2,462	2,102	1,103	670	605	254	64	87	3	7,349
Child endowment(*b*)	64,684	52,675	28,177	17,835	14,845	6,612	1,209	1,810	74	187,920
Unemployment benefits	3,665	2,425	2,913	1,637	304	264	19	15	..	11,242
Sickness benefits	2,502	1,646	941	563	420	165	22	30	..	6,290
Special benefits(*c*)	351	664	149	58	33	42	1	2	..	1,300
Sheltered employment allowances(*d*)	11	..	..	88	5	..	..	..	..	104
Commonwealth Rehabilitation Service	645	493	284	267	193	58	..	2	..	1,944
States Grants (Deserted Wives)(*e*)	140	..	..	25	35	..	..	..	..	201
Total social services	*298,666*	*205,508*	*125,553*	*73,926*	*57,295*	*24,973*	*2,868*	*3,309*	*637*	*792,734*
Health services—										
Hospital benefits	11,697	6,279	3,268	2,467	2,060	735	(*f*)80	(*f*)12	..	26,598
Hospital benefits for pensioners	8,871	5,272	4,259	1,969	2,316	783	40	156	..	23,665
Nursing home benefits	10,386	5,121	3,752	2,202	2,222	800	..	3	..	24,486
Medical benefits	18,314	12,301	4,499	5,774	4,093	1,450	..	..	..	46,431
Medical benefits for pensioners	6,217	4,242	2,364	1,607	1,172	460	5	49	..	16,116
Pharmaceutical benefits	28,989	20,031	10,036	6,685	4,974	2,049	(*g*)	(*h*)255	..	73,019
Pharmaceutical benefits for pensioners	13,563	7,505	5,016	3,038	2,143	850	(*g*)	..	..	32,115
Tuberculosis campaign—										
Allowances	363	251	285	80	55	38	17	2	..	1,091
Maintenance and surveys(*i*)	3,813	3,306	2,415	620	807	304	..	2	..	11,269
Milk for school children	3,350	2,623	1,372	952	850	503	75	106	..	9,831
Miscellaneous health services—										
Commonwealth Health laboratories	183	101	565	22	36	101	106	193	..	1,307
Blood products(*j*)	..	..	..	..	..	..	..	863	..	863
Home Nursing Service—subsidies to States	209	288	95	32	131	10	..	..	..	765
Radio-active isotopes(*k*)	..	..	..	..	..	..	..	20	134	155
Hearing aids for school children and pensioners(*l*)	152	2	1	..	1	..	..	..	195	351
Poliomyelitis vaccine(*m*)	..	..	..	..	..	..	..	908	1	908
Total health services	*106,108*	*67,322*	*37,928*	*25,447*	*20,860*	*8,083*	*323*	*2,570*	*330*	*268,972*
Rental losses(*n*)	..	..	44	..	..	..	..	..	..	44
Home savings grants(*o*)	4,597	4,470	1,820	1,235	740	305	8	124	..	13,299
Grand total	**409,371**	**277,301**	**165,345**	**100,609**	**78,894**	**33,360**	**3,199**	**6,003**	**967**	**1,075,049**

(*a*) Payments for some hospital, medical and pharmaceutical benefits for residents of the Northern Territory and the Australian Capital Territory are included in the amounts shown for the States. (*b*) Includes payments for student children aged 16 to 20 years. (*c*) Includes special benefits paid to migrants in Commonwealth centres or hostels awaiting their first placement in employment in Australia. (*d*) Commenced 6 July 1967. (*e*) Commenced 1 January 1968. (*f*) Excludes insured patients and pensioner patients. Payments for insured patients are included in amounts shown for States. (*g*) Included in South Australia. (*h*) Includes $137.966 for Royal Flying Doctor Service and Bush Nursing Services and $11,907 for Immigration medical services not allocable by State; and $105,000 for A.C.T. public hospitals. Other payments for pharmaceutical benefits in the A.C.T. are included in the amount shown for N.S.W. (*i*) Mainly payments to State Governments as a contribution towards the cost of surveys and the maintenance of institutions for the treatment of tuberculosis. (*j*) Cost of processing blood products by the Commonwealth Serum Laboratories. (*k*) Cost of purchases by the Commonwealth X-Ray and Radium Laboratory. (*l*) Purchases of component parts by the Commonwealth Acoustic Laboratories. (*m*) Cost of vaccine from Commonwealth Health Laboratories. (*n*) Contributions to States, under the Commonwealth and State Housing Agreement Act 1945, for losses on rental housing. (*o*) Expenditure under the Home Savings Grant Act 1964.

COMMONWEALTH EXPENDITURE FROM NATIONAL WELFARE FUND TOTAL, 1963-64 TO 1967-68

Service, etc.	1963–64	1964–65	1965–66	1966–67	1967–68	
					Amount	Per head
	$'000	$'000	$'000	$'000	$'000	$
Social services—						
Age and invalid pensions	399,880	426,597	442,355	481,840	513,984	43.10
Widows' pensions	41,569	47,044	50,017	56,438	61,061	5.12
Funeral benefits	812	866	1,050	1,334	1,338	0.11
Maternity allowances	7,457	7,294	7,159	7,294	7,349	0.62
Child endowment(*b*)	168,758	172,830	176,432	199,282	187,920	15.76
Unemployment, sickness and special benefits(*c*)	21,625	14,540	15,557	19,044	18,832	1.58
Sheltered employment allowances(*d*)	..	..	..	..	104	0.01
Commonwealth Rehabilitation Service	1,489	1,604	1,660	1,844	1,944	0.16
States Grants (Deserted Wives)(*e*)	..	..	..	..	201	0.02
Total social services	*641,590*	*670,774*	*694,229*	*767,076*	*792,734*	*66.47*
Health services—						
Hospital and nursing home benefits	42,863	45,206	46,084	48,667	51,085	4.28
Hospital benefits for pensioners	13,354	13,585	14,659	18,731	23,665	1.98
Medical benefits	24,848	35,277	41,282	43,841	46,431	3.89
Medical benefits for pensioners	9,531	9,320	13,365	14,351	16,116	1.35
Pharmaceutical benefits	58,237	60,638	67,713	72,001	73,019	6.12
Pharmaceutical benefits for pensioners	20,602	21,564	24,071	29,280	32,115	2.69
Tuberculosis campaign—						
Allowances	1,593	1,458	1,286	1,193	1,091	0.09
Maintenance and surveys(*i*)	10,473	10,146	13,379	10,983	11,269	0.94
Milk for school children	7,775	8,059	8,493	9,021	9,831	0.82
Miscellaneous health services	1,785	2,859	3,453	3,947	4,349	0.36
Total health services	*191,060*	*208,113*	*233,785*	*252,014*	*268,972*	*22.55*
Rental losses(*n*)	45	130	213	142	44	..
Home savings grants(*o*)	..	11,349	13,346	11,885	13,299	1.12
Grand total	**832,696**	**890,366**	**941,574**	**1,031,117**	**1,075,049**	**90.14**

For footnotes (*b*), (*c*), (*d*), (*e*), (*i*), (*n*), and (*o*) *see* table on page 438.

State expenditure on certain welfare services

The following table shows net expenditure from State government funds on certain welfare services. The figures exclude expenditure on unemployment, bush fire, flood, etc., relief, Aboriginal welfare, and some other items which are excluded because information cannot be obtained for all States. Loan fund expenditure is excluded also. Because of differences in organisation and accounting methods, the information shown for some classes is not on exactly the same basis for all States; it may also be incomplete because particulars of some activities are not separately recorded and are therefore excluded. The expenditure shown is 'net' in the sense that receipts for services rendered have been deducted from gross expenditure.

NET EXPENDITURE BY STATE GOVERNMENTS ON CERTAIN WELFARE SERVICES, 1967-68

($'000)

Service	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Total
Relief of aged, indigent and infirm, child welfare, etc.	15,791	11,293	5,840	3,147	3,108	1,968	41,148
Miners' phthisis	67	53	..	..	62	..	182
Total	**15,858**	**11,346**	**5,840**	**3,147**	**3,170**	**1,968**	**41,330**

Aboriginal welfare

The Aboriginal population as defined at the 1966 Census of Population and Housing includes persons who, at the Census, stated themselves to be 'Aboriginal', or who stated themselves to be more than half Aboriginal, or who were half Aboriginal and half European. The number enumerated in this group at the 1966 Census was 80,207 persons. This figure excludes Torres Strait Islanders, persons who stated that they were less than half Aboriginal and persons who are half Aboriginal and half non-European. An independent estimate, which includes each of these categories, made by the Commonwealth Office of Aboriginal Affairs sets the total Aboriginal population at about 122,000 persons. The Aboriginal population is increasing at a rate faster than the Australian average and some forecasts suggest that the number might double by the end of the century.

The aim of the Commonwealth Government is to help the Aborigines to become an integral part of the Australian community life. There is the widest range of social levels in the Aboriginal population. Few tribal Aborigines still live a nomadic life. Most live a settled, but in many other ways traditional, tribal life. There are others at all stages between this and full participation in the life of the Australian community.

Commonwealth and State expenditure from Consolidated Revenue. Expenditure out of Commonwealth and State Consolidated Revenue Funds specifically on Aboriginal welfare during the years 1963–64 to 1967–68 is shown in the following table. The figures hereunder do not represent total Commonwealth and State expenditure on Aborigines. They exclude expenditure from Trust Funds and Loan Funds and there may be some other activities for which figures are not available. As citizens, Aborigines benefit like other Australians from services provided by various Government departments.

In recent years the Commonwealth, State and Northern Territory legislatures have been active in progressively removing all discriminatory legislation from the relevant Acts of the Commonwealth and State Parliaments and from the relevant Ordinances of the Northern Territory, and therefore direct benefits are not as readily indentifiable as they were in the past. In the legal and formal sense none of the opportunities open to Australians generally is closed to Aborigines. There are no Aborigines in Tasmania.

ABORIGINAL WELFARE: EXPENDITURE FROM CONSOLIDATED REVENUE FUNDS, STATES AND TERRITORIES, 1963-64 TO 1967-68

($'000)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*N.T.*	*A.C.T.*	*Aust.*
1963–64 . . .	605	120	1,705	1,212	1,550	3,045	11	8,248
1964–65 . . .	712	130	1,764	1,270	1,880	3,201	6	8,965
1965–66 . . .	809	130	2,016	1,428	2,151	2,595	7	9,136
1966–67 . . .	909	131	2,317	1,490	2,315	3,151	2	10,314
1967–68 . . .	814	200	3,009	1,634	2,690	3,983	2	12,333

In the 1968–69 Budget the Commonwealth provided $10,000,000 in an Aboriginal Trust Account, $5,000,000 of which is to be used to assist the States in helping Aborigines in the specific fields of health, housing and education. The remaining $5,000,000 forms a capital fund for Aboriginal corporate or individual ventures with economic potential.

Referendum 1967: A referendum in May 1967 led to two changes in the Commonwealth Constitution. The first was the repeal of section 127 of the Constitution which provided that in reckoning the numbers for census purposes, Aborigines should not be counted. The second was the deletion of the words 'other than the Aboriginal race in any State' from Section 51 (xxvi) which relates to the power of the Commonwealth Parliament to make laws with respect to people of any race. The Federal Government can now make special laws for the people of the Aboriginal race. The Australian people voted overwhelmingly in support of these changes, and the Federal Government, whose aim is to help the Aborigines to become an integral part of Australian community life now shares with the States, power and responsibilities for the advancement of Aborigines.

Office of Aboriginal Affairs: The Commonwealth Government has created an Office of Aboriginal Affairs, in Canberra, as the agency co-ordinating policy affecting Aborigines, as well as continuing its financial and administrative responsibilities for Aborigines in the Northern Territory and Australian Capital Territory through the Department of the Interior. The Office serves a Council, comprising a Chairman and two members, which has two functions: to advise in the framing of national policies for the Aboriginal citizens of Australia; and to consult with Commonwealth Departments and authorities whose activities have a bearing on Aboriginal welfare.

Commonwealth social services

Under the provisions of section 51 of the Constitution, the Commonwealth Government is empowered to legislate on:

> '(xxiii) Invalid and old age pensions:
>
> '(xxiiiA) The provision of maternity allowances, widows' pensions, child endowment, unemployment, pharmaceutical, sickness and hospital benefits, medical and dental services (but not so as to authorize any form of civil conscription), benefits to students and family allowances:'.

The latter paragraph was inserted in the Constitution after being accepted by the electors at a referendum on 28 September 1946. The enabling Act was assented to on 19 December 1946.

Before 1947, Commonwealth social service benefits were paid under various Acts. On 1 July 1947, with the passage of the *Social Services Consolidation Act* 1947, all Acts providing social service benefits were amalgamated. This Act eliminated certain anomalies and obsolete provisions, and changed the title 'old-age pension' to 'age pension'. The word 'Consolidation' was dropped from the short title of the Act in 1954. The Act is at present styled the *Social Services Act* 1947–1968.

Social service benefits provided

The social service benefits provided by the Commonwealth Government under the *Social Services Act* 1947–1968, and the date on which each came into operation, are:

Age pension	1 July 1909
Child endowment	1 July 1941
Child endowment—student children	14 January 1964
Commonwealth Rehabilitation Service	10 December 1948
Funeral benefit	1 July 1943
Guardians' allowances for widowers and other unmarried age and invalid pensioners with children in their care	14 October 1965
Invalid pension	15 December 1910
Maternity allowance	10 October 1912
Sheltered employment allowances	30 June 1967
Sickness benefit	1 July 1945
Special benefit	1 July 1945
Supplementary assistance (age, invalid and widows' pensions)	15 October 1958
Training scheme for widow pensioners	27 September 1968
Unemployment benefit	1 July 1945
Widows' pensions	30 June 1942
Widows' pensions—children's allowances	2 October 1956
Wives' and children's allowances for pensioners who are invalids	8 July 1943
Wives' and children's allowances for age pensioners	14 October 1965

Age and invalid pensions

Age pensions are payable to men, sixty-five years of age and over, and women, sixty years of age and over, who have lived in Australia continuously for at least ten years, which need not be immediately prior to the date of claim for a pension. If a person has completed five years', but not ten years', continuous residence, and has lived in Australia for periods which exceed a total of ten years, the period of continuous residence otherwise required is reduced by the total of his periods of residence in Australia in excess of ten years. Any periods of absence during which a person's home remains in Australia, and absences in certain other circumstances, are counted as residence, and any absence in an external Territory of the Commonwealth, while not counting as residence, does not interrupt continuity of residence in Australia. Residence in New Zealand or the United Kingdom may be treated as residence in Australia.

Invalid pensions are payable to persons, sixteen years of age and over, who have lived in Australia for a continuous period of five years (including certain absences) at any time, and who are permanently incapacitated for work to the extent of at least eighty-five per cent, or permanently blind. If the incapacity or blindness first occurred outside Australia, except during a temporary absence, a period of ten years' continuous residence is necessary, but if a person has completed five years', but not ten years', continuous residence and has lived in Australia for periods which exceed a total of ten years, the period of continuous residence otherwise required is reduced by the total of his periods of residence in Australia in excess of ten years. Residence in New Zealand or the United Kingdom may be treated as residence in Australia. Certain absences do not affect eligibility.

Current rates of pension. The maximum standard rate was increased to $728 per annum ($14 a week) from 27 September 1968. This is payable to a single, widowed, or divorced pensioner, a married man whose wife receives a wife's allowance, or a married pensioner whose spouse is not receiving an age or invalid pension, an unemployment, sickness or special benefit, a tuberculosis allowance, or a service pension. The maximum married rate was also increased from 27 September 1968, and is $1,300 per annum ($25 a week) for a married couple, both pensioners, i.e. $650 per annum ($12.50 a week) each. For a married person whose spouse receives a tuberculosis allowance, or a service pension, the maximum rate is also $650 per annum ($12.50 a week).

A wife's allowance may be granted, subject to the means test, to the wife of an invalid pensioner or of an age pensioner permanently incapacitated, blind, or who has the care of a child, if she is not receiving an age or invalid pension, or a service pension under the *Repatriation Act* 1920–1968 (*see* Chapter 5, Repatriation). The maximum annual rate of a wife's allowance is $364 per annum ($7 a week). Additional pension of $130 per annum ($2.50 a week) is also payable, subject to a means test, for each dependent child under 16 years. A guardian's allowance of up to $4 a week is payable to widowers and other unmarried age or invalid pensioners who have one or more children in their care.

Eligibility for the additional pension for children is extended to include a child over sixteen years until he reaches twenty-one years, provided he is wholly or substantially dependent on the pensioner and is receiving full-time education at a school, college or university. Supplementary assistance of up to $2 a week, subject to a means test, is available to pensioners receiving the maximum standard rate pension if they pay rent or pay for board and lodging or for lodging. From 1958 to October 1965 the rate was $1 a week, and supplementary assistance was available only to maximum standard rate pensioners paying rent who were considered to depend entirely on the pension. At 30 June 1968, 601,286 age pensioners (88 per cent of all age pensioners) and 106,971 invalid pensioners (93 per cent of all invalid pensioners) were receiving the maximum pension.

If the pensioner is an inmate of a benevolent home, the maximum payable to him is $4.80 a week if he is eligible for the standard rate pension, or $4.50 a week otherwise. The rest is paid to the home for his maintenance. The balance is not paid to the home if the pensioner is in an infirmary ward, as payments under the Commonwealth Hospital Benefits Scheme are made in that case. The maximum payable to a standard rate pensioner is increased if supplementary assistance is also payable.

A table showing the maximum rates of pension operating since 1 July 1909 at dates prior to 14 October 1965 is included on page 608 of Year Book No. 51. Details of increased allowances payable from 14 October 1965 to 27 September 1968, when the current rates of pensions and allowances became operative, are included on page 505 of Year Book No. 52 and page 465 of Year Book No. 54.

Means test. Age and invalid pensions (other than pensions paid to blind persons) and allowances paid to wives are subject to a means test which applies to income and property. From March 1961 the means tests which previously applied separately on income and property were merged into one composite means test. The rate of pension payable depends on the claimant's *means as assessed.* These consist of his annual rate of income plus a property component equal to $2 for each complete $20 of his net property above $400. A persons' *means as assessed* may consist entirely of income, entirely of the property component, or of various combinations of income and property component. From 27 April 1967 the pension payable is calculated by deducting from the applicable maximum annual rate of pension, plus, where applicable, guardian's allowance, and or additional pension for children, the amount by which *means as assessed* exceed $442 where the pensioner is married or $520 where the pensioner is single, widowed, or divorced. Where the standard rate applies, no pension is payable where the value of property is $12,880 or more ($14,960 or more if qualified for a guardian's allowance) if the pensioner is single, widowed or divorced; or $12,100 if the pensioner is married. Where the married rate applies, no pension is payable where the value of property is $11,320 or more. The wife's allowance is affected by income and property on the same basis as the pension, i.e. it is reduced by the amount of *means as assessed* over $442. Supplementary assistance is reduced by the amount by which *means as assessed* exceed $52.

Certain types of income are excepted. The main exceptions are: income from property; gifts or allowances from children, parents, brothers, or sisters; benefits (other than annuities) from friendly societies; child endowment or other payments for children; Commonwealth health benefits and amounts received from registered benefit organisations. A pensioner's income may also be reduced by up to $156 per annum ($3 a week) for each dependent child under sixteen years (twenty-one years if a full-time student).

Certain types of property are disregarded. They include the permanent home of the pensioner, his furniture and personal effects, the surrender value (up to $1,500) of life insurance policies, the capital value of annuities or contingent interests, and the value of any reversionary interests.

For the purposes of the means test the income and property of a married person are considered to be half the total income and property of the husband and wife unless they are legally separated or in other special circumstances.

AGE AND INVALID PENSIONS: STATES AND TERRITORIES, 30 JUNE 1968

Pensions in force	*N.S.W.(a)*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Age—									
Males .	76,066	49,402	34,882	18,810	14,724	6,178	620	488	201,170
Females .	186,625	125,375	73,188	45,622	34,126	14,233	707	1,219	481,095
Persons .	*262,691*	*174,777*	*108,070*	*64,432*	*48,850*	*20,411*	*1,327*	*1,707*	*682,265*
Invalid—									
Males .	25,025	14,910	10,686	5,243	4,682	2,065	278	130	63,019
Females .	21,184	11,808	8,935	4,341	3,628	1,483	188	159	51,726
Persons .	*46,209*	*26,718*	*19,621*	*9,584*	*8,310*	*3,548*	*466*	*289(b)*	*114,745*

(a) See footnote (e) to table on page 444. (b) Includes 291 pensioners tentatively transferred to sheltered employment allowances.

NEW PENSIONERS, BY SEX AND MARITAL STATUS: AUSTRALIA, 1967-68

	Age pensioners			*Invalid pensioners*			
Marital status	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Total*
Single(a) . .	2,981	4,996	7,977	5,089	3,736	8,825	16,802
Married . .	17,543	20,123	37,666	7,697	3,665	11,362	49,028
Widowed . .	2,797	21,751	24,548	672	1,065	1,737	26,285
Divorced . .	444	1,106	1,550	449	439	888	2,438
Total .	**23,765**	**47,976**	**71,741**	**13,907**	**8,905**	**22,812**	**94,553**

(a) Includes married but permanently separated.

The average age of new age pensioners was 68.4 years for men and 66.5 years for women.

NEW INVALID PENSIONERS, BY AGE GROUP: AUSTRALIA, 1967-68

		16–19 years	*20–44 years*	*45–59 years*	*60–64 years*	*65 years and over*	*Total*
Males	number	1,174	2,571	5,563	4,081	518	13,907
Females . . .	number	1,089	1,840	5,336	257	383	8,905
Persons	number	*2,263*	*4,411*	*10,899*	*4,338*	*901*	*22,812*
	Per cent	*10*	*19*	*48*	*19*	*4*	*100*

Persons at or above the qualifying age for age pensions, when granted invalid pensions, are generally those with insufficient residence to qualify for age pension.

AGE AND INVALID PENSIONS: SUMMARY, AUSTRALIA, 1963-64 TO 1967-68

Year	*Pensioners at end of year*				*Total payments during year* (*b*)	*Average weekly pension as at end of year*		
	Age							
	Number	*Rate* (*a*)	*Invalid*	*Total*		*Age* (*c*)	*Invalid* (*c*)	*Age and invalid combined* (*c*)
			No.	No.	$'000	$	$	$
1963–64	615,186	530	109,725	724,911	399,880	10.71	11.26	10.79
1964–65	628,100	532	107,473	735,573	426,597	11.18	11.73	11.26
1965–66	636,984	530	106,645	743,629	442,355	11.33	12.24	11.46
1966–67	651,363	(*d*)532	112,314	763,677	481,840	12.38	13.30	12.52
1967–68	(*e*)682,265	546	(*e*)114,745	(*e*)797,010	513,984	(*f*)12.22	13.37	(*f*)12.39

(*a*) Number of pensioners per 1,000 persons of pensionable age (males aged 65 years and over and females aged 60 years and over). (*b*) Includes allowances and supplementary assistance. (*c*) Includes supplementary assistance. (*d*) For earlier years persons of pensionable age—*see* footnote (*a*)—exclude Aborigines, while the number of pensioners includes Aborigines throughout. (*e*) The 1967–68 figures are adjusted by reducing the number of invalid pensioners by 3,178 and increasing the number of age pensioners by 1,485 following the introduction of computer processing in New South Wales. (*f*) Decrease in average rates for age pensions at 30 June 1968 was due to the increased number of new pensioners who became eligible for part pensions as a result of amending legislation approved in April 1967.

The sum paid in age and invalid pensions in 1967–68, including the amount paid to homes for the maintenance of pensioners and allowances to wives of invalid pensioners, represented an expenditure of $43.10 per head of population, compared with $41.15 in 1966–67.

Sheltered employment allowance

This allowance, which reduces on a graduated scale as earnings from a sheltered workshop increase, was introduced on 30 June 1967 to provide an incentive for invalid pensioners and certain other disabled people to engage in approved sheltered employment. The allowance is paid to invalid pensioners so engaged in lieu of invalid pension and to disabled people who are not receiving a pension but would be likely to become permanently incapacitated to a pensionable degree if not provided with sheltered employment and are otherwise qualified to receive an invalid pension.

The maximum rate of the allowance is the same as the maximum rate of invalid pension. Additional benefits such as wife's allowance and additional pension for children that would be paid if the person were an invalid pensioner are added to the sheltered employment allowance to form one composite payment.

The means test is the same as for invalid pensions except that, in relation to earnings from sheltered employment, half the amount by which a single person's earnings exceed $10 a week is disregarded; in the case of a married person, half the amount by which his earnings exceed $17 but not $25 a week is disregarded.

During 1967–68, thirteen workshops were approved under the Social Services Act 1947–68 to pay sheltered employment allowances on behalf of the Department of Social Services. At 30 June 1968, six workshops were paying the allowances to 309 employees including 291 who had been tentatively transferred from invalid pensions and who are also included in the number of invalid pensioners shown in the tables on pages 443 and 444. Employees in other sheltered workshops continued to receive invalid pensions. Expenditure for the year 1967–68 was $104,365.

Child endowment

A person who is resident in Australia and has the custody, care and control of one or more children under the age of sixteen years or of a student child over sixteen but under twenty-one years, or an approved institution of which children are inmates, is qualified to receive an endowment in respect of each such child. There are provisions to meet cases of families divided because of divorce, separation, unemployment or death of a parent. There is no means test.

Twelve months' residence in Australia is required if the claimant and the child were not born here, but this requirement is waived if the Department of Social Services is satisfied that they are likely to remain in Australia permanently. Where the child's father is not a British subject, endowment is payable if the child was born in Australia, if the mother is a British subject, or if the Department is satisfied that the child is likely to remain permanently in Australia. Under certain conditions, endowment may be paid to Australians who are temporarily absent overseas.

Rates of endowment. From 1 July 1941 the rate of endowment was 50c a week for each child under sixteen in excess of one in a family, and for each child under sixteen in an approved institution. The rate was increased to 75c a week in June 1945, and to $1.00 a week in November 1948. From June 1950, 50c a week became payable for the first or only child in a family. From January 1964 the rate was increased to $1.50 a week for the third and subsequent children under sixteen years in families and for each child in an institution, and that amount also became payable for full-time students between sixteen and twenty-one years. Full-time student children are those receiving full-time education at a school, college or university and who are not in employment or engaged in work on their own account. From September 1967 the weekly rate for the fourth and each subsequent child under sixteen years in a family was increased by progressive amounts of 25c each, making $1.75 payable for the fourth child, $2.00 for the fifth, and so on.

Number of claims and endowed children—children under sixteen years. The number of families receiving child endowment at 30 June 1968 in respect of children under sixteen years was 1,669,629, an increase of 29,239 or 1.8 per cent during the year.

CHILD ENDOWMENT: CLAIMS AND ENDOWED CHILDREN UNDER 16 YEARS STATES, TERRITORIES, ETC., 30 JUNE 1968

State, Territory, etc.	*Family groups*			*Approved institutions*		*Total endowed children under 16 years*
		Endowed children under 16 years				
	Claims in force	*Number*	*Average number per claim*	*Number (a)*	*Endowed child inmates under 16 years*	
New South Wales	604,456	1,294,661	2.14	138	6,185	1,300,846
Victoria	462,300	1,015,234	2.20	112	5,303	1,020,537
Queensland	234,989	545,691	2.32	56	3,730	549,421
South Australia	159,723	352,366	2.21	56	1,912	354,278
Western Australia	130,389	302,516	2.32	71	3,976	306,492
Tasmania	54,912	127,849	2.33	22	432	128,281
Northern Territory	8,236	18,958	2.30	35	5,669	24,627
Australian Capital Territory	14,339	31,920	2.23	1	32	31,952
Abroad	285	644	2.26	..	..	644
Total	**1,669,629**	**3,689,839**	**2.21**	**491**	**27,239**	**3,717,078**

(*a*) All institutions approved for receipt of endowment.

The following table shows, as at 30 June 1968, the number of claims in force and the number of endowed children under sixteen years in family groups, classified according to the number of endowed children in the family group. The families included in the table are not necessarily made up entirely of the children of one marriage, but may include step-children, foster children, adopted children, and any other children in the custody, care and control of the claimant.

CHILD ENDOWMENT: ENDOWED CHILDREN UNDER 16 YEARS IN FAMILY GROUPS TOTAL, 30 JUNE 1968

Number of endowed children under 16 years in family group	*Claims in force*	*Endowed children under 16 years*	*Number of endowed children under 16 years in family group*	*Claims in force*	*Endowed children under 16 years*
1	578,130	578,130	9	1,309	11,781
2	543,950	1,087,900	10	505	5,050
3	314,377	943,131	11	158	1,738
4	143,330	573,320	12	74	888
5	54,504	272,520	13	19	247
6	21,400	128,400	14	2	28
7	8,304	58,128	15 or more	5	82
8	3,562	28,496	**Total**	**1,669,629**	**3,689,839**

Number of claims and endowed children—student children sixteen to twenty-one years

CHILD ENDOWMENT: CLAIMS AND ENDOWED STUDENT CHILDREN STATES, TERRITORIES, ETC., 30 JUNE 1968

	Family groups			Approved institutions		
		Endowed student children				
State, Territory, etc.	Claims in force	Number	Average number per claim	Number(a)	Endowed student child inmates	Total endowed student children
New South Wales	60,978	66,456	1.09	13	112	66,568
Victoria	49,574	54,834	1.11	32	100	54,934
Queensland	14,046	15,144	1.08	14	137	15,281
South Australia	17,447	18,801	1.08	17	197	18,998
Western Australia	10,106	10,870	1.08	22	129	10,999
Tasmania	3,824	4,163	1.09	3	3	4,166
Northern Territory	340	367	1.08	5	21	388
Australian Capital Territory	2,147	2,410	1.12	..	..	2,410
Abroad	26	31	1.19	..	..	31
Total	**158,488**	**173,076**	**1.09**	**106**	**699**	**173,775**

(a) With claims in respect of student children. Included with approved institutions in table on page 447.

CHILD ENDOWMENT: ENDOWED STUDENT CHILDREN IN FAMILY GROUPS TOTAL, 30 JUNE 1968

Number of endowed student children in family group	Claims in force	Endowed student children
1	144,559	144,559
2	13,292	26,584
3	617	1,851
4	18	72
5	2	10
Total	**158,488**	**173,076**

Liability and expenditure—children under sixteen years

CHILD ENDOWMENT: CHILDREN UNDER 16 YEARS LIABILITY AND EXPENDITURE, STATES, TERRITORIES, ETC., 1967-68 ($'000)

	Annual liability at 30 June 1968			
State, Territory, etc.	Family groups	Approved institutions	Total	Total payments to endowees and institutions during year(a)
New South Wales	62,184	482	62,667	59,635
Victoria	49,521	414	49,935	47,822
Queensland	27,734	291	28,025	26,675
South Australia	17,103	149	17,252	16,426
Western Australia	15,144	310	15,454	14,030
Tasmania	6,484	34	6,518	6,271
Northern Territory	975	442	1,418	1,180
Australian Capital Territory	1,542	2	1,544	1,694
Abroad	34	..	32	(b) 74
Total	**180,720**	**2,125**	**182,845**	**173,808**

(a) *See* footnote (*b*) on page 447. (*b*) Includes expenditure for endowed student children; separate figures not available.

Liability and expenditure—student children sixteen to twenty-one years

CHILD ENDOWMENT: STUDENT CHILDREN, LIABILITY, AND EXPENDITURE, STATES, TERRITORIES, ETC., 1967-68

($'000)

	Annual liability at 30 June 1968			
State, Territory, etc.	*Family groups*	*Approved institutions*	*Total*	*Total payments to endowees and institutions during year*
New South Wales	5,184	9	5,192	5,049
Victoria	4,277	8	4,285	4,853
Queensland	1,181	11	1,192	1,502
South Australia	1,466	15	1,482	1,409
Western Australia	848	10	858	815
Tasmania	325	..	325	341
Northern Territory	29	2	30	29
Australian Capital Territory	188	..	188	155
Abroad	..	..	..	(*a*)
Total	**13,498**	**55**	**13,552**	**14,112**

(*a*) Included in preceding table showing expenditure for endowed children under sixteen years; separate figures not available.

Child endowment summary, 1963–64 *to* 1967–68

CHILD ENDOWMENT: SUMMARY, AUSTRALIA, 1963-64 TO 1967-68

	At end of year					
	Family group claims in force					
Year	*For children under 16 years(a)*	*For student children(a)*	*Approved institutions*	*Total endowed children*	*Annual liability for endowment (b)*	*Total payments during year (b)*
					$'000	$'000
1963–64	1,555,630	113,062	502	3,631,047	175,766	(*c*)168,758
1964–65	1,582,801	128,641	487	3,710,616	180,065	172,830
1965–66	1,610,490	132,900	488	3,762,646	182,288	176,432
1966–67	1,640,390	151,623	487	3,834,917	185,940	(*c*)199,282
1967–68	1,669,629	158,488	491	3,890,853	196,957	187,920

(*a*) Claims by families with children under sixteen and student children are shown in both columns. Information on the number of families having such dual claims is not available. (*b*) A number of endowments are paid every twelve weeks. During two years out of every three there are four such payments but every third year there are five. Figures for annual liability therefore, reflect trends in expenditure on child endowment more accurately than do figures for payments. (*c*) Expenditure for this year includes five twelve-weekly payments.

Commonwealth Rehabilitation Service

The Commonwealth Rehabilitation Service was set up to help persons who are unable to work because of physical handicap, or who have had to give up their employment because of sickness or injury. It helps disabled persons to reach their maximum physical fitness and to prepare for suitable employment. They are given suitable treatment and training, the cases selected being those in which the person's disability is remediable and there are reasonable prospects of his engaging in a suitable vocation within three years after the commencement of treatment or training.

The service is available to invalid and widow pensioners, persons receiving unemployment, sickness or special benefits, persons receiving tuberculosis allowances, and persons aged fourteen or fifteen who, without treatment and training, would be likely to qualify for an invalid pension on reaching the age of sixteen years. During treatment, payment of pension or benefit continues. When vocational training begins the pension or benefit is suspended and a rehabilitation allowance, together with a training allowance of $4.00 a week, is paid instead. With an invalid pensioner, or a sickness, unemployment, or special beneficiary, the rehabilitation allowance is equivalent to and calculated in the same manner as an invalid pension. In the case of a widow pensioner the rate is the same as that of the widow's pension.

Living-away-from-home allowances are paid where necessary. Fares and living expenses (including those of an attendant where required) incurred in connection with treatment, training or attendance for an interview or for medical examination may also be paid. Necessary artificial replacements, surgical aids and appliances may be provided, free of charge, to a person receiving treatment and training or who needs them to assist him to engage in a suitable vocation after the discontinuance of his treatment and training or who needs them otherwise to assist in his rehabilitation. He may also be provided with books, equipment and tools of trade costing up to $80 in any period of twelve months. Where books, equipment and tools of trade provided to assist a person to engage in a suitable vocation are retained by him, he is liable to repay the cost but is not required to make repayment until after he has commenced employment. The repayment may be made by instalments. If the treatment or vocational training does not result in the trainee's being able to engage in employment, he receives the pension or benefit to which he is entitled. Disabled persons who cannot qualify for the free service may pay for rehabilitation themselves, or they may be sponsored by government or private organisations. Rehabilitation allowances, training allowances, living-away-from-home allowances and other allowances are not payable in these cases. Books, tools, etc., are available on a repayment basis.

Numbers dealt with by the service

COMMONWEALTH REHABILITATION SERVICE: AUSTRALIA, 1967-68

				Placed in employment	
Type	*Referred*	*Accepted*	*Completed training*	*After training (a)*	*Without training*
Invalid pensioners	10,644	347	99	123	103
Widow pensioners	8	1	..	..	..
Unemployment and sickness beneficiaries	12,130	910	149	168	604
Special beneficiaries	2	..	..	..	..
Recipients of tuberculosis allowance	42	13	10	8	6
Persons aged 14–15 years	123	60	16	21	42
Persons provided with rehabilitation on payment of the cost by themselves or by another authority	117	110	1	8	91
Total	**23,066**	**1,441**	**275**	**328**	**846**

(a) Includes persons who had received training prior to 1 July 1967.

Of the 1,441 persons accepted during 1967–68, 74 per cent were under forty years of age. The average number undergoing rehabilitation at the end of each month during the year was 977. Total cost of this service during 1967–68 was $1,943,617.

Funeral benefits

A funeral benefit of up to $20.00 is payable to the person who has paid, or is liable to pay, the cost of the funeral of an age or invalid pensioner or of a claimant who, but for his death, would have been granted an age or invalid pension, or of a person who at the time of his death was receiving, or was a claimant for, a tuberculosis allowance, if he would otherwise have been qualified to receive an age or invalid pension. Where the cost of the funeral has been met partly by payment from a contributory funeral benefit fund of an organisation other than a friendly society, funeral benefit is payable to the extent of the amount (not above $20.00) by which the cost of the funeral exceeded the amount paid from the fund. The maximum amount payable is increased to $40.00 where an age, invalid or widow pensioner is liable for the funeral expenses of a spouse, a child under sixteen years, or another age, invalid or widow pensioner.

FUNERAL BENEFITS GRANTED: STATES, TERRITORIES, ETC., 1963-64 TO 1967-68

(Number)

State, Territory, etc.	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
New South Wales	16,680	17,709	17,015	18,567	17,092
Victoria	10,594	11,280	11,354	12,386	12,292
Queensland	6,176	6,542	6,596	7,188	7,129
South Australia	3,618	3,801	3,751	4,031	4,531
Western Australia	2,749	2,981	2,709	3,129	3,151
Tasmania	1,242	1,324	1,340	1,347	1,345
Northern Territory	14	18	8	2	7
Australian Capital Territory	73	94	92	108	122
Abroad	2	5	2	6	3
Total	**41,148**	**43,755**	**42,867**	**46,764**	**45,672**

Total cost of funeral benefits granted during 1967–68 was $1,338,495.

Maternity allowances

Maternity allowances are paid to provide financial assistance towards the expenses associated with the birth of children and are additional to the benefits provided under the Commonwealth health scheme. They are not subject to a means test.

Subject to certain conditions, a maternity allowance is payable to a woman who gives birth to a child, either in Australia or on board a ship proceeding to Australia or from a port in Australia or an Australian Territory to another such port, and, on the date on which she lodges her claim, is residing in Australia or is in Australia and intends to remain permanently, provided she receives no benefit similar to a maternity allowance from the country from which she came. A woman who gives birth to a child during a temporary absence from Australia may also be eligible. An alien mother may receive the allowance if she or her husband resided in Australia for at least twelve months immediately prior to the birth of the child, or if she is likely to remain in Australia permanently.

Rates of allowance. The allowance is $30.00 if the mother has no other children, $32.00 if she has one or two children under sixteen, and $35.00 if she has three or more other children under sixteen. The amount is increased by $10.00 for each additional child born at a birth. An advance payment of $20.00 may be made four weeks before the expected date of birth. The balance is payable immediately after the birth. Payment may be made in respect of the birth of a still-born child, or a child which lives for less than twelve hours, if the child had developed for at least five and a half months.

Claims paid

MATERNITY ALLOWANCES: CLAIMS PAID AT EACH RATE STATES AND TERRITORIES, ETC., 1967–68

(Number)

State, Territory, etc.	*Single births*			*Multiple births*								*Total claims paid*
				Twins			*Triplets*			*Quad-ruplets*		
	$30	*$32*	*$35*	*$40*	*$42*	*$45*	*$50*	*$52*	*$55*	*$60*	*$65*	
N.S.W.	29,753	34,993	11,918	211	369	164	1	6	..	..	..	77,415
Vic.	24,510	29,856	10,940	258	353	155	3	5	2	1	..	66,083
Qld	12,305	15,001	6,790	107	152	106	2	1	..	1	..	34,465
S.A.	7,880	9,860	3,147	60	109	48	..	3	..	..	..	21,107
W.A.	6,909	8,723	3,149	65	73	48	..	2	..	..	..	18,969
Tas.	2,851	3,568	1,436	27	35	21	..	1	..	..	..	7,939
N.T.	644	811	498	9	11	10	..	..	1	..	1	1,985
A.C.T.	1,047	1,243	397	7	16	7	..	..	..	..	..	2,717
Abroad	57	31	7	1	..	..	..	..	..	..	..	96
Total	**85,956**	**104,086**	**38,282**	**745**	**1,118**	**559**	**6**	**18**	**3**	**2**	**1**	**230,776**

MATERNITY ALLOWANCES: CLAIMS PAID, STATES, TERRITORIES, ETC. 1963–64 TO 1967–68

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Abroad*	*Total*
					NUMBER					
1963–64. .	83,580	64,438	34,966	21,096	16,988	8,437	1,663	2,013	270	233,451
1964–65. .	80,592	64,424	33,963	20,820	16,667	7,821	1,661	2,015	176	228,139
1965–66. .	77,739	63,934	33,488	20,594	16,764	7,578	1,731	2,178	305	224,311
1966–67. .	79,078	66,098	33,489	20,596	17,510	7,606	1,955	2,211	242	228,785
1967–68. .	77,415	66,083	34,465	21,107	18,969	7,939	1,985	2,717	96	230,776
					AMOUNT ($'000)					
1963–64. .	2,649	2,065	1,128	675	546	272	54	60	9	7,457
1964–65. .	2,569	2,058	1,093	666	534	251	53	64	6	7,294
1965–66. .	2,475	2,040	1,075	657	536	243	55	70	8	7,159
1966–67. .	2,514	2,104	1,077	654	559	243	62	72	8	7,294
1967–68. .	2,462	2,102	1,103	670	605	254	64	87	3	7,349

Unemployment, sickness, and special benefits

Unemployment and sickness benefits are paid to males over sixteen and under sixty-five years of age, and females over sixteen and under sixty years of age, who are unemployed or who are temporarily incapacitated for work and thereby suffer loss of income. They must have been living in Australia during the preceding twelve months or be likely to remain permanently in Australia. A person receiving an age, invalid or widow's pension, or a service pension (as distinct from a war pension) under the *Repatriation Act* 1920–1968 or a tuberculosis allowance, is ineligible to receive a benefit.

To qualify for an unemployment benefit a person must establish that he is unemployed and that his unemployment is not due to his being a direct participant in a strike, that he is capable and willing to undertake suitable work, and that he has taken reasonable steps to obtain such work. Registration with the local Commonwealth District Employment Office is necessary. To qualify for a sickness benefit, a person must establish that he is temporarily incapacitated for work because of sickness or accident and that he has thereby suffered a loss of salary, wages or other income. A married woman is not eligible to receive a sickness benefit if it is reasonably possible for her husband to maintain her. Where her husband is able to maintain her only partially, a benefit may be paid at such rate as is considered reasonable in the circumstances. In exceptional cases a married woman may qualify for unemployment benefit in her own right.

A special benefit may be granted to a person not qualified for unemployment or sickness benefit who is not receiving an age, invalid or widow's pension or a service pension, and who, because of age, physical or mental disability or domestic circumstances, or for any other reason, is unable to earn a sufficient livelihood for himself and his dependants. Recipients of special benefits include, among others, persons caring for invalid parents, also deserted wives and persons ineligible for age, invalid or widows' pensions because of lack of residence qualifications.

Special benefits are also paid to migrants who are in Commonwealth centres or hostels awaiting their first placement in employment in Australia. During this time they receive a short instruction in English and in Australian conditions to facilitate their assimilation into the community and employment.

Rates of benefit. The maximum weekly rates of benefit payable and permissible income in respect of benefit periods which commenced on or after 1 March 1962 are as follows.

	Maximum weekly rate	*Permissible weekly income*
	$	$
Unmarried person under 18 years of age . .	3.50	2.00
Unmarried person 18 to 20 years of age . .	4.75	2.00
All others	8.25	4.00

An additional benefit of $6 a week may be paid for a dependent spouse and $1.50 a week for each dependent child under sixteen years of age if resident in Australia. Additional benefit, at the same rate as that for a dependent spouse, may be paid where a woman is keeping house for a claimant who has one or more children under sixteen years of age in his care. It may be granted only if no such benefit is payable for his wife, and the housekeeper is substantially dependent on him but not employed by him.

The weekly rate of benefit is reduced by the amount by which a beneficiary's other income exceeds the amount shown in the relevant line of the final column in the preceding table. For unemployment benefit purposes the income of the spouse is also taken into account unless the claimant and his spouse are permanently separated. For sickness benefit purposes the income from an approved friendly society or other similar approved body in respect of the incapacity for which sickness benefit is payable is disregarded. 'Income' does not include child endowment or other payments for children, Commonwealth hospital and pharmaceutical benefits, a tuberculosis allowance, or an amount paid in reimbursement of medical, dental or similar expenses. There is no means test on property.

The amount of compensation, damages or similar payment, or war pension, if paid in respect of the same incapacity as that for which sickness benefit is claimed, is deducted from the sickness benefit. If not paid in respect of the same incapacity, compensation is regarded as income and war pension is ignored.

There is a waiting period of seven days for which unemployment or sickness benefit is not payable.

Benefits

UNEMPLOYMENT, SICKNESS, AND SPECIAL BENEFITS
STATES AND TERRITORIES, 1967-68

		N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Number admitted to benefit—										
Unemployment—										
Males		33,255	24,287	(*a*)31,632	14,851	3,769	2,108	219	297	(*a*)110,418
Females		15,162	8,366	12,245	6,949	2,917	1,638	70	91	47,438
Persons		48,417	32,653	(*a*)43,877	21,800	6,686	3,746	289	388	(*a*)157,856
Sickness—										
Males		20,695	11,703	9,275	4,792	4,334	1,376	233	231	52,639
Females		7,867	5,028	3,248	1,932	1,462	576	54	118	20,285
Persons		28,562	16,731	12,523	6,724	5,796	1,952	287	349	72,924
Special—										
Ordinary—										
Males		540	283	364	93	53	37	23	2	1,395
Females		473	1,968	303	94	80	62	5	4	2 989
Persons		1,013	2,251	667	187	133	99	28	6	4,384
Migrants—										
Persons		1,944	5,066	..	221	..	..	..	..	7,231
Total—										
Males(b)		*54,490*	*36,273*	*(a)41,271*	*19,736*	*8,156*	*3,521*	*475*	*530*	*(a)164,452*
Females(b)		*23,502*	*15,362*	*15,796*	*8,975*	*4,459*	*2,276*	*129*	*213*	*70,712*
Persons(c)		*79,936*	*56,701*	*(a)57,067*	*28,932*	*12,615*	*5,797*	*604*	*743*	*(a)242,395*
Persons on benefit at end of year—										
Unemployment—										
Males		3,745	4,436	2,200	2,215	391	334	16	13	13,350
Females		2,692	1,705	1,615	1,246	355	301	4	7	7,925
Persons		6,437	6,141	3.815	3,461	746	635	20	20	21,275
Sickness—										
Males		2,756	1,538	982	629	463	200	16	20	6,604
Females		1,147	771	274	282	176	91	9	16	2,766
Persons		3,903	2,309	1,256	911	639	291	25	36	9,370
Special—										
Ordinary—										
Males		248	68	78	22	14	10	9	..	449
Females		462	1,002	470	102	96	77	6	1	2,216
Persons		710	1,070	548	124	110	87	15	1	2,665
Migrants—										
Persons		133	152	..	14	..	..	..	..	299
Total—										
Males(b)		*6,749*	*6,042*	*3,260*	*2,866*	*868*	*544*	*41*	*33*	*20,403*
Females(b)		*4,301*	*3,478*	*2,359*	*1,630*	*627*	*469*	*19*	*24*	*12,907*
Persons(c)		*11,183*	*9,672*	*5,619*	*4,510*	*1,495*	*1,013*	*60*	*57*	*33,609*
Benefits paid—										
Unemployment	$'000	3,665	2,425	2,913	1,637	304	264	19	15	11,242
Sickness	$'000	2,502	1,646	941	563	420	165	22	30	6,290
Special	$'000	351	664	149	58	33	42	1	2	1,300
Total benefits paid	$'000	*6,518*	*4,734*	*4,004*	*2,258*	*758*	*471*	*42*	*46*	*18,832*

(*a*) Excludes 277 Torres Strait Islanders. (*b*) Excludes migrants in Commonwealth centres or hostels awaiting their first placement in employment in Australia. (*c*) Includes migrants in the category described in footnote (*b*).

UNEMPLOYMENT, SICKNESS, AND SPECIAL BENEFITS: SUMMARY, AUSTRALIA 1963-64 TO 1967-68

Year	*Number admitted to benefit*			*Average number of persons on benefit at end of each week*			*Amount paid in benefits*		
	Unemployment	*Sickness*	*Special (a)*	*Unemployment*	*Sickness*	*Special (a)*	*Unemployment*	*Sickness*	*Special (a)*
							$'000	$'000	$'000
1963–64	139,500	69,503	7,602	25,925	10,994	2,684	13,458	6,901	1,266
1964–65	88,512	68,637	6,719	13,742	10,457	2,567	6,807	6,498	1,235
1965–66	114,497	69,585	7,838	14,927	10,044	2,507	7,813	6,483	1,261
1966–67	151,024	72,276	9,340	20,640	10,108	2,413	11,186	6,611	1,247
1967–68	157,856	72,924	11,615	21,496	9,935	2,532	11,242	6,290	1,300

(*a*) Includes migrants in Commonwealth centres or hostels awaiting their first placement in employment in Australia.

Widows' pensions

Rates and conditions. Widows' pensions are payable according to the following classes. The rates shown have been in operation since September 1968.

Class 'A'. A widow who has the custody, care and control of one or more children under the age of sixteen years—$936 per annum ($18 a week). This includes the standard rate pension of $728 per annum ($14 a week) and a mother's allowance of $208 per annum ($4 a week). In addition, extra pension of $130 per annum ($2.50 a week) for each child under sixteen years is payable, subject to the means test. Payment may be made for a child over sixteen years until he reaches twenty-one years, if he is wholly or substantially dependent on the widow and is receiving full-time education at a school, college or university.

Class 'B'. A widow who has no children under sixteen years of age or eligible full-time student children in her custody, care and control, and who is not less than fifty years of age or who, after having attained the age of forty-five years, ceased to receive a Class 'A' widows' pension because she no longer had the custody, care and control of a child—$650 per annum ($12.50 a week).

Class 'C'. A widow who is under fifty years of age and has no children under the age of sixteen years, or eligible full-time student children, in her custody, care and control, but is in necessitous circumstances within the twenty-six weeks after the death of her husband—$12.50 a week for not more than twenty-six weeks after the death of her husband. If the widow is pregnant this period may be extended until the child's birth. She may then become eligible for a Class 'A' widow's pension.

Widow pensioners may receive supplementary assistance of up to $104 per annum ($2 a week), subject to a means test, if they pay rent or pay for board and lodging or for lodging. From October 1958 to October 1965 the rate was $1 a week and was payable to widows, otherwise qualified, who were considered to be entirely dependent on the pension.

For classes 'A' and 'B' the term 'widow' includes a wife who has been deserted by her husband without just cause for a period of at least six months, a divorcee, a woman whose husband has been imprisoned for at least six months, and a woman whose husband is in a mental hospital. Certain dependent females also may qualify for 'A', 'B' or 'C' Class pensions.

The residence qualification is five years' continuous residence in Australia immediately prior to the date of lodgment of the claim, but this period may be waived if the widow and her husband were living permanently in Australia when he died. Certain absences are ignored.

A widow's pension is not payable to a woman receiving an age or invalid pension, a sheltered employment allowance, a tuberculosis allowance, or a war widow's pension, or to a deserted wife or divorcee who has not taken reasonable action to obtain maintenance from her husband or former husband.

Means test. Widows' pensions are subject to a means test on income and property. The pension payable depends on the claimant's *means as assessed.* These consist of her annual rate of income together with a property component equal to $2 for every complete $20 by which the value of her property is in excess of a stipulated sum. A Class 'A' widow has a basic exemption of $2,000 when the value of her property exceeds $4,500, but no property component is calculated where she has property of no more than $4,500 in value. A Class 'A' pension is not payable where a widow has property valued at $16,560 or more. In the case of a Class 'B' widow, $400 of property is exempt and no Class 'B' pension is payable where property is $12,100 or more. In each case the maximum rate of pension is reduced by the amount by which the widow's *means as assessed* exceed $520. There is no specific means test for the Class 'C' pension, which is paid only where it is evident that a widow has insufficient means of support. The types of income and property disregarded for means test purposes are the same as for age and invalid pensions. Supplementary assistance is reduced by the amount by which *means as assessed* exceed $52.

The average age of new widow pensioners admitted during 1967–68 was: Class 'A', 37.7 years; Class 'B', 57.8 years; Class 'C', 43.7 years; and for all classes, 47.2 years.

Pensions

WIDOWS' PENSIONS: STATES, TERRITORIES, ETC., 1967-68

State, Territory, etc.	*Number admitted—all classes* (*a*)	*Pensions current at end of year*				*Average weekly pension at end of year* (*b*)	*Amount paid in pensions during year* (*b*) (*c*)
		Class 'A'	*Class 'B'*	*Class 'C'*	*All classes*		
						$	$'000
New South Wales . .	5,837	13,163	14,711	41	27,915	15.78	22,745
Victoria	4,213	9,293	10,051	28	19,372	15.85	15,807
Queensland . . .	2,432	5,782	5,937	13	11,732	15.87	9,564
South Australia . .	1,565	3,480	3,922	9	7,411	15.69	5,937
Western Australia . .	1,346	2,520	2,950	12	5,482	15.33	4,346
Tasmania . . .	546	1,379	1,207	2	2,588	16.21	2,125
Northern Territory . .	46	130	109	. .	239	16.46	217
Australian Capital Territory	119	152	178	. .	330	15.67	249
Abroad	. .	(*d*)	(*d*)	(*d*)	(*d*)	. .	71
Total . . .	**16,104**	(*e*)**35,899**	(*e*)**39,065**	**105**	(*e*)**75,069**	(*f*)**15.79**	**61,061**

(*a*) Excludes transfers from one class to another. (*b*) Includes supplementary assistance and allowances. (*c*) Includes payments to benevolent homes for maintenance of pensioners. (*d*) Included in the figures for the State or Territory in which the pensioner is normally domiciled. (*e*) and (*f*) *See* footnotes (*d*) and (*e*) to next table.

WIDOWS' PENSIONS: SUMMARY, AUSTRALIA, 1963-64 TO 1967-68

Year	*Number admitted—all classes* (*a*)	*Pensions current at end of year*				*Average weekly pension at end of year* (*b*)	*Amount paid in pensions during year* (*b*) (*c*)
		Class 'A'	*Class 'B'*	*Class 'C'*	*All classes*		
						$	$'000
1963–64	14,207	27,371	34,659	94	62,124	13.57	41,569
1964–65	14,243	29,713	35,574	111	65,398	14.09	47,044
1965–66	13,972	31,796	36,703	107	68,606	14.53	50,017
1966–67	15,727	34,526	38,259	105	72,890	15.81	56,438
1967–68	16,104	(*d*)35,899	(*d*)39,065	105	(*d*)75,069	(*e*)15.79	61,061

(*a*) Excludes transfers from one class to another. (*b*) Includes supplementary assistance and allowances. (*c*) Includes payments to benevolent homes for maintenance of pensioners. (*d*) During 1967–68, a reduction of 769 Class 'A' and 233 Class 'B' pensioners was made following the introduction of computer processing in New South Wales. (*e*) Decrease in average rate due mainly to the increased number of new pensioners who became eligible for part pension as a result of amending legislation approved in April 1967.

Training scheme for widow pensioners

In September 1968 a scheme was introduced to help widow pensioners acquire vocational skills which will enable them to undertake gainful employment. Training may take the form of refresher courses or it may involve training for new skills. During training the widow continues to receive her pension for as long as she remains eligible. In addition to pension, she may qualify for a training allowance of $4 a week and a living-away-from-home allowance of $5 a week. The cost of tuition fees and fares may also be met.

Reciprocal social services agreements with other countries

New Zealand. An agreement between the Governments of Australia and New Zealand for reciprocity in social services came into operation on 3 September 1943 and was amended from 1 July 1949. The reciprocal arrangements cover age and invalid pensions, widows' pensions, child endowment, and unemployment and sickness benefits, and apply to both permanent and temporary changes of residence. Residence in one country may be treated as residence in the other country in relation to entitlement to benefits in which a residential qualification applies. Persons from one country taking up a permanent residence in the other country become eligible for any of the specified benefits of the new country under the same conditions (with one or two exceptions) as apply to citizens of that country. Persons in receipt of any of the specified benefits in one country may continue to receive those benefits while temporarily absent in the other country.

Britain. A reciprocal agreement on social services between Britain and Australia came into operation on 7 January 1954. Amendments became effective from 1 April 1958 and 1 October 1962. Under the current agreement residence in one country may be treated as residence in the other country as the basis for entitlement to benefits in which a residential qualification applies. Australians going to Britain for permanent residence are treated in Britain as if they had been insured under the National Insurance Scheme while in Australia, so that they can qualify for various National Insurance benefits. There is also provision for the safeguard of social service rights for persons going from one country to the other for temporary residence.

Commonwealth assistance to aged persons homes and sheltered workshops and for accommodation for disabled persons employed in sheltered workshops

The Aged Persons Homes Act 1954–1967. This Act is designed to encourage the provision of homes in which aged persons may reside in conditions approaching normal domestic life.

To be eligible for assistance under the Act an organisation must be:

(*a*) carried on otherwise than for the purposes of profit or gain to the individual members; and

(*b*) a religious organisation, an organisation the principal objects or purposes of which are charitable or benevolent, an organisation of former members of the defence forces established in every State or a State branch of such an organisation, an organisation approved by the Governor-General for the purposes of the Act, or a local governing body.

An organisation conducted or controlled by, or by persons appointed by, the Government of the Commonwealth or of a State is not eligible for assistance under the Act.

The Director-General of Social Services may make a grant of money to an organisation as assistance towards meeting the cost of the construction or purchase of a home, including land, to be used permanently for the accommodation of aged persons. The grant is made on a basis of $2 for each $1 raised by the organisation ($1 for each $1 from 1954 to 1957), not counting money which the organisation receives from a governmental body (other than a local governing body) or borrowed. Before a grant is made the Director-General must be satisfied that the sum of the money expended and the money at present available for expenditure by the organisation towards the capital cost of the home, together with the amount of the grant, will be not less than the capital cost of the home.

The following table gives information regarding grants approved during 1967–68. The amounts granted include new grants approved in 1967–68 together with adjustments made during the year in respect of grants originally approved in earlier years.

AGED PERSONS HOMES: GRANTS APPROVED, AMOUNTS GRANTED, AND BEDS PROVIDED, STATES AND TERRITORIES, 1967-68

		N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Total*
Grants approved	. No.	53	40	14	40	14	9	..	..	170
Amounts granted	$'000	3,967	2,338	768	1,998	833	316	..	..	10,220
Beds provided	. No.	1,054	621	233	597	237	89	..	..	2,831

The following table gives information regarding grants approved for each of the years 1963–64 to 1967–68. The amounts granted in each year include new grants approved in that year together with adjustments made during the year in respect of grants originally approved in earlier years.

AGED PERSONS HOMES: GRANTS APPROVED, AMOUNTS GRANTED, AND BEDS PROVIDED AUSTRALIA 1963-64 TO 1967-68

Year	*Grants approved*	*Amounts granted*	*Beds provided*
	No.	$'000	No
1963–64 . . .	134	7,281	2,466
1964–65 . . .	151	6,680	2,083
1965–66 . . .	149	9,576	2,807
1966–67 . . .	158	11,095	3,227
1967–68 . . .	170	10,220	2,831

Since the commencement of the Act in December 1954, 1,658 grants amounting to $79,718,526 have been approved, and accommodation has been provided for 29,275 aged persons.

The Sheltered Employment (Assistance) Act 1967. This Act superseded the *Disabled Persons Accommodation Act* 1963. Under the latter Act, which was in operation from 25 November 1963 to 30 June 1967, total grants of $372,118 had been approved. The new Act, which came into operation on 30 June 1967, provides for subsidies of $2 for $1 to eligible organisations towards the capital cost of sheltered workshops, the equipment for them, and accommodation for disabled people employed or likely to be employed in sheltered workshops. The Act covers the erection of buildings and the purchase of existing buildings. In both cases the cost of land is included in the capital cost as is the cost of any necessary conversion of an existing building. The subsidy may also be paid towards the rental, for up to three years, where rented premises are used to provide sheltered employment. Organisations eligible for grants under the Act are the same as those specified under the Aged Persons Homes Act. A substantial number of the people employed in the sheltered workshop must be medically qualified for an invalid pension, or be likely to become so qualified if not provided with sheltered employment, and must receive payment for their work before the organisation can qualify for a subsidy.

The total subsidy for the 103 grants approved during 1967–68 amounted to $1,725,340. Of these grants, 24 were for workshop buildings and extensions involving a subsidy of $1,203,249. When completed, these buildings are expected to provide sheltered employment for an additional 1,156 disabled people. The remaining grants and subsidies approved were divided as follows: 65 grants totalling $124,530 for workshop equipment; 9 in respect of rental of premises used as sheltered workshops, $18,176; and 5 grants involving $379,385 for projects providing accommodation for 113 disabled workshop employees.

The States Grants (Deserted Wives) Act 1968

This Act came into operation on 21 June 1968 with retrospective effect from 1 January 1968. The Act provides for assistance to be given by the Commonwealth to the States in respect of aid for mothers with children where the mothers are not eligible for benefits under the Social Services Act. Broadly, these include deserted wives during the first six months of desertion, wives during the first six months of the husband's imprisonment, deserted de facto wives and de facto wives of prisoners, and other unmarried mothers who are ineligible for Commonwealth widows' pension.

The type of assistance attracting a Commonwealth grant may be provided in the form of cash, food or clothing. The grant is made by the Commonwealth to the States on the basis of half the cost of the approved assistance paid to the mother or half the amount of Class A widows' pension whichever is the lesser.

By 30 June 1968 all States except Victoria had agreed to take advantage of the legislation but, largely because of the time factor, only three States had applied for payment of the Commonwealth subsidy.

Telephone rental concessions

Effective from 1 October 1964 an amendment to the Telephone Regulations of the Post and Telegraph Act provides that a telephone service for qualified age, invalid and widow pensioners and blind people is available at an annual rental equal to two-thirds of the amount otherwise payable. The Department of Social Services re-imburses the Postmaster-General's Department for the cost of the scheme including administrative costs. Expenditure during 1967–68 was $1,578,656, plus administrative costs amounting to $48,197.

Compassionate allowances

These allowances are paid by the Commonwealth on a discretionary basis to certain people who are unable to qualify for pensions or other benefits under the provisions of the Social Services Act. Expenditure on compassionate allowances and payments of a similar nature during 1967–68 was $84,344.

Selected non-government organisations

National Safety Council of Australia

The National Safety Council of Australia was founded in Victoria in 1927. In 1959 it was reorganised, and new Articles of Association were adopted in 1961, placing it on a more truly federal basis and reflecting the expanded character of the Council in the forty-one years since its formation. The objects of the Council are to devise and encourage the adoption of safety measures of all kinds, to promote discussion of all matters relating to safety measures, to conduct an educational campaign among the people of Australia to stimulate the adoption and observance of safety measures, and to consider, initiate and support improvements in the laws of the Commonwealth of Australia, the States and local governing bodies, calculated to prevent accidents.

The Council is now registered in Canberra, with Divisions established in all States. It is managed by a Federal Council responsible for those objectives which are of a national character. Each State Division controls its own affairs which are of State or local character.

Life saving

There are two life saving organisations in Australia, the Royal Life Saving Society—Australia and the Surf Life Saving Association of Australia. The objects of these organisations are the prevention of death from drowning and other forms of asphyxiation; the education of the general public in methods of life saving and resuscitation of the apparently drowned or asphyxiated; technical education in water safety; the encouragement of swimming and life saving in schools and other organisations; the encouragement of all aspects of swimming and aquatics which would assist in saving lives; and the initiation of research within the field of water safety and life saving.

The Royal Life Saving Society operates at lakes, rivers, and bay and harbour beaches, and gives instruction to school pupils and members of other bodies throughout Australia except on surf beaches.

The Surf Life Saving Association of Australia controls all life saving activities on the ocean beaches throughout Australia. In all, over 230 clubs are affiliated, comprising a membership of over 25,000. Volunteer patrols operate every week-end, and in recent years over 5,000 rescues have been recorded during each surfing season. The total number of recorded rescues during the past sixty-one years is 162,669.

Royal Humane Society

The Royal Humane Society of Australasia has as its main object the granting of awards to all who with bravery, skill and perserverance risk their own lives in saving or attempting to save those of their fellow creatures. The classes of awards are (*a*) Gold Medal, (*b*) Silver Medal, (*c*) Bronze Medal, and (*d*) Certificate of Merit. The Clarke Medal is awarded for the outstanding case of the year, and the Rupert Wilks Trophy is awarded for the most outstanding bravery by a child under thirteen years of age.

The Order of St John

The Priory in Australia of the Most Venerable Order of the Hospital of St John of Jerusalem is the governing body of the various activities of the Order, which comprises the St John Ambulance Association, the St John Ambulance Brigade and the Hospitallers' Clubs in all States and Commonwealth Territories.

Members of the St John Ambulance Association teach first aid, home nursing, hygiene, and child welfare, and members of the St John Ambulance Brigade provide first aid at public functions. The Hospitallers' Clubs in each State undertake the collection of funds for the St John Ophthalmic Hospital in Jerusalem and other duties which tend to bring together all persons interested in the work of the Order. The Order of St John maintains ambulance transport services in some States, acts as an auxiliary to such services in other States, and provides technical reserves for the medical services of the Crown.

The National Headquarters at Canberra was opened by the Prior, His Excellency the Governor-General in May 1968.

CHAPTER 14

PUBLIC HEALTH

STATE GOVERNMENT ACTIVITIES

(Includes activities of the Commonwealth Government in the Northern Territory and the Australian Capital Territory)

Public health legislation and administration

For details of the administration of health services in each State, the Northern Territory, and the Australian Capital Territory, *see* pages 543–50 of Year Book No. 53. For administrative changes which took place in 1967, *see* pages 481–2 of Year Book No. 54. The following paragraphs refer briefly to administrative changes in 1968.

In *Queensland* the Division of Psychiatric Services has undergone a general revision during 1968. On 1 August 1968, the Brisbane Special Hospital and the Ipswich Special Hospital were reconstituted as the Wolston Park Hospital, Wacol, and the Challinor Centre for the Training and Care of the Intellectually Handicapped, respectively. The adult section of the Basil Stafford Training Centre for the Intellectually Handicapped has now been classified as a public charitable institution, while the children's section and school have been classified as special hospitals. The Toowoomba Special Hospital was reconstituted as the Baillie Henderson Hospital; and the Epileptic Home, Willowburn, classified as a public charitable institution, has been renamed the Rockville Training Centre. A Welfare and Guidance Clinic was opened in the grounds of Townsville Hospital, and a new male Enthetic Disease clinic was opened in Brisbane, incorporating modern diagnostic and treatment facilities and accommodation for staff.

In *South Australia* to assist with the planning of community services for the care of old people, both in and out of hospitals and rest homes, a geriatrician has recently been appointed in the Department of Public Health.

Supervision and care of infant life

Because the health of mothers and infants depends largely on pre-natal attention as well as after-care, government, local government and private organisations provide instruction and treatment for mothers before and after confinement. The health and well-being of mother and child are looked after by infant welfare centres, baby clinics, crèches, etc.

In all States, Acts have been passed with the object of supervising the conditions of infant life and reducing the rate of mortality. (Information regarding infant mortality will be found in Chapter 8, Vital Statistics—*see* pages 190–2.) Departments control the boarding out of the wards of the State to suitable persons. Wherever possible, the child is boarded out to its mother or to a near female relative. Stringent conditions regulate the adoption, nursing and maintenance of children placed in foster-homes by private persons, while special attention is devoted to the welfare of ex-nuptial children.

Under the provisions of the *Social Services Act* 1947–1968 maternity allowances are paid to provide financial assistance towards the expenses associated with the birth of children. Information concerning maternity allowances is given in Chapter 13, Welfare Services.

Nursing activities

Several State Governments maintain institutions which provide treatment for mothers and children and, in addition, subsidies are granted to various associations engaged in welfare work.

Infant welfare centres. The following table gives particulars of the activities of infant welfare centres for the year 1968. The figures relate to all centres, whether permanently staffed or on a temporary or part-time basis. Centres may be located at accommodation specially provided for this purpose, or at halls, schools, etc.

INFANT WELFARE CENTRES: STATES AND TERRITORIES, 1968

	N.S.W.	*Vic.*	*Qld (a)*	*S.A. (a)*	*W.A.*	*Tas.*	*N.T. (a)*	*A.C.T. (a)*	*Aust.*
Number of centres . .	441	714	280	282	76	109	20	30	1,952
Attendances at centres .	1,022,793	1,452,457	459,430	271,008	256,129	142,702	23,932	53,688	3,682,139
Visits by nurses to homes	n.a.	151,139	1,013	35,814	27,210	77,521	8,922	5,940	n.a.
Visits by nurses to hospitals	n.a.	27,049	29,240	n.a.	16,880	n.a.	1,119	nil	n.a.

(*a*) Year ended 30 June 1968.

Mobile units are used as centres in some States. The numbers of these in 1968 included in the above table were as follows: Victoria, 4; Queensland, 2; South Australia, 2; Western Australia, 4; Tasmania, 13; and the Northern Territory, 1.

In the last thirty-five years the number of attendances at the infant welfare centres has increased almost four-fold. The numbers of attendances at five-year intervals since 1930 were as follows: 1930, 919,893; 1935, 1,355,306; 1940, 2,035,299; 1945, 2,927,764; 1950, 3,049,375; 1955, 3,099,233; 1960, 3,482,383; and 1965, 3,598,781.

Bush Nursing Associations. Treatment for mothers and children is also provided by the Bush Nursing Associations. The numbers of centres maintained by the Associations in 1968 were: New South Wales, 17; Victoria, 58; Queensland, 5; South Australia, 33; Western Australia, 18; and Tasmania, 24.

Medical and dental inspection of school children

Medical and dental inspection of school children is carried out in all States, in the Northern Territory and in the Australian Capital Territory. In some States travelling clinics have been established to deal with dental defects.

New South Wales

School medical and dental services in New South Wales are under the control of the State Department of Public Health. The staff of the Child Health and Special Services sections of the Bureau of Maternal and Child Health, which conduct the school medical services and provide diagnostic, evaluation and supervisory services for atypical children, included in January 1969, 74 full-time and 2 part-time medical officers, 4 full-time and 7 sessional psychiatrists, 8 sessional ear, nose and throat surgeons, an ophthalmologist, 23 clinical psychologists and 1 sessional psychologist, 87 nursing sisters, 19 social workers, 30 full-time speech therapists, and one part-time speech therapist.

The aim of the school medical services is to examine all school children in the State in order to discover any departure from normal health, physical or mental, and to notify the parent or guardian of any need for further investigation or treatment. Annual visits are made to government schools, and also to private schools which have applied for this service, in the metropolitan, Newcastle, and Wollongong areas, and in some of the larger country towns. Children are fully examined at kindergarten or on entry into primary school. Review examinations, with particular emphasis on vision and hearing, are conducted on pupils in fourth grade in primary schools and second and fourth forms in secondary schools, and on others who appear to need additional examinations. Excluding 114,573 review examinations, medical officers of this service examined 115,241 children in 1968. In other country areas there is a scheme for school children to be examined by local medical practitioners under the supervision of local municipal and shire councils.

The Department conducts 9 child health centres (8 in the metropolis and 1 at Newcastle), 12 child guidance clinics (11 in the metropolis and 1 at Newcastle), 10 hearing clinics (9 in the metropolis and 1 at Newcastle), and 16 speech therapy clinics, 9 of which are established at child health centres. Children in need of treatment other than child guidance or speech therapy are referred to a medical practitioner or to the out-patient department of a public hospital.

The school dental service has a staff of 32 dental officers, 30 dental assistants, and 5 dental nurses. The service is provided by 7 dental clinics established in the grounds of 3 metropolitan and 4 country public schools, 19 mobile clinics in country and outer metropolitan areas, and a dental team with the Royal Flying Doctor Service (based at Broken Hill). In 1968, 83,175 school children were examined by the school dental service, and 21,298 of these were treated, and 26,159 notified of dental defects.

Victoria

The School Medical Service is a division of the Maternal and Child Welfare Branch of the Department of Health. It has a full time staff of 40 doctors, 44 nurses and 21 administrative or office staff. As well, it has a part time staff of 3 medical officers, 3 nurses and the following consultants: 3 paediatricians, 2 psychiatrists, a psychologist and an ophthalmologist.

The present aim of the service is to examine fully all primary school children in their second year at school and to test their vision again in grade 4, and in form 2 of secondary schools. Children may also be examined at other times on the suggestion of teachers or parents, who suspect that ill health is interfering with school progress. Any disabilities found in children are brought to the notice of their parents who are advised to consult their family doctor for further advice or treatment. School nurses under medical direction visit homes and schools to follow up cases so referred. In co-operation with the Education Department and the Mental Health Authority, children with defects of vision and hearing and those who are mentally backward are assessed for special educational help.

School medical officers and nurses in all their activities seek to improve community and child health through health education to parents, teachers, teachers in training, and school children. Special programmes are conducted in teachers colleges where, through education and counselling, school medical officers seek to induce positive attitudes to health and healthy living, and to foster the ability of the teacher in training to impart this to children.

The School Medical Service advises the Education Department on medical problems and undertakes all medical assessments in connection with the teaching service, including medical assessment for temporary and permanent appointments, resumption of duty after sick leave, confinement leave, and medical eligibility of teachers for superannuation benefits.

The School Dental Service has an establishment of forty-three dental officers and provides dental attention for primary school children. The objectives of the service are:

- (*a*) to see the children during their first year of school life and to give treatment;
- (*b*) to see them again annually and, by providing regular treatment, keep their mouths in healthy condition throughout their primary school life.

Acceptance for treatment is limited to those up to eight years of age, who are then treated at each subsequent visit until they reach twelve years of age. No child is treated unless parental consent has been previously given.

In the metropolitan area there are three dental centres, each of which has a district allotted to it, and childern are brought from their schools by a contract bus service under the control of an escort teacher provided by the Education Department.

In the country priority is given to areas of scattered population remote from dental facilities and every effort is made to maintain annual visits to schools in such districts. Treatment is made available to the children at these schools by the use of mobile dental units.

A number of homes and orphanages in the metropolitan area and in the provincial cities of Geelong, Ballarat and Bendigo are also visited. A dental officer is specifically allotted to the treatment of physically handicapped and mentally handicapped children.

The service is currently available to 60,000 children including those attending primary school, and at various institutions in the metropolitan and country areas.

Queensland

During 1967–68 medical officers and nurses examined 114,485 school children; 5,375 children had disabilities of which parents were notified and advised to seek attention. In western Queensland local doctors act as part-time ophthalmic surgeons. Advice is given on school sanitation, communicable diseases in schools and health education.

During 1968 school dentists gave treatment to 9,240 school children who resided in areas beyond easy reach of hospital dental clinics. The treatment was carried out at four rail dental clinics and with portable equipment at schools. In addition, school children are treated at hospital dental clinics in the larger towns.

South Australia

Medical services were first introduced into schools in 1913. Since 1951 all school health services have been the responsibility of a branch of the Department of Public Health. The staff of the School Health Branch at the beginning of 1969 included 11 medical officers, 10 nurses, 9 dental officers, 7 dental assistants, 3 otologists (2 part-time), and 3 audiometrists. State schools within a radius of 60 miles from Adelaide and at five large country centres are visited annually, and the children are medically examined while in grades 1, 4, and 7 in the primary schools and in their second and fourth years in secondary schools. Efforts are made to visit the remaining country schools every three years, when all the children are examined.

During 1968, 97,880 children were examined by medical officers in 207 country and 243 metropolitan schools. Of these, 5,720 required treatment for defective vision, 3,419 for defective hearing, and 10,347 for dental disorders. Dentists using mobile vans examined 3,744 school children in country areas where a private dental service was not readily available; children offered treatment in 1968 numbered 3,088, including some who were examined in the previous year; 2,878 accepted and were treated free of charge. During 1968, 1,246 children attending schools from which the dental training school draws its requirements were offered treatment free of charge, and 978 children accepted the offer. There were 2,962 children examined at the Deafness Guidance Clinic during 1968. Of the 1,557 new patients, 667 were referred to doctors or hospitals for treatment.

Western Australia

The School Medical Service of the State Public Health Department employs 6 full-time medical officers. During 1968 these officers examined 67,651 children (47,701 metropolitan, and 19,950 country) at 483 schools (170 government and 64 non-government metropolitan schools, and 199 government and 50 non-government country schools). The service provides for the examination of each child twice during the school career.

During 1968 the 16 full-time dentists employed by the School Dental Service visited 4 metropolitan schools, 54 country schools and 22 orphanages and Aboriginal missions. The number of children examined was 7,785. With the consent of the parents, 4,062 children were treated. Seven dental vans were in operation and there were 8 static clinics in the north and north-west of the State.

Tasmania

During 1968, 4 full-time and 8 part-time medical officers examined school children in government and non-government schools. In addition 2 regional medical officers of health also examined school children. Twenty-five full-time and 5 part-time sisters visited homes and schools. Of the 19,741 children examined by medical officers, 4,697 were found to have defects. An asthma survey which will continue for a number of years, was commenced with the examination of 8,600 children born in 1961.

The School Dental Health Service, available free to all school children, aims to examine and treat every child each six months. In 1967–68, 24 fixed surgeries were in use in 19 districts and in clinics at Hobart and Launceston. Fifteen mobile clinics were also in use. An orthodontic service based in Hobart, using fixed and mobile clinics, supplements the therapeutic dental service. During the year ended 30 June 1968 operative dental treatment was given to 38,255 patients.

In 1966 a school of dental nursing was established in Hobart. Ten students were enrolled in 1966 and have now graduated from the two year course and have been posted to various clinics throughout the State. Ten students enrol each year. The school treats about 40 patients a day in its training surgeries. It is expected that approximately 30 nurses will work with dentists in the School Dental Health Service; a dental nursing certificate, or its equivalent, is required before a nurse can be appointed.

Northern Territory

The Schools Medical Service conducts routine physical examinations of children attending pre-schools and schools in the Northern Territory. During 1967–68, a total of 2,024 children were thus examined. The service also conducts immunisation clinics and in conjunction with the Commonwealth Acoustic Laboratories tests children with hearing problems.

Dental services totalling 6,398 were conducted in 1967–68 in Darwin and Alice Springs.

Australian Capital Territory

The A.C.T. Health Services Branch of the Commonwealth Department of Health is responsible for health aspects of child welfare in the Australian Capital Territory. These include the School Medical Service carried out by 3 medical officers and 3 trained nurses, and the School Dental Service, staffed by 15 dentists, together with surgery and clinical assistants.

A Child Guidance Clinic assists children with psychiatric disorders. During 1968, 318 new cases were referred to it. The Child Guidance Clinic is staffed by 3 sessional psychiatrists, 2 full-time psychologists, a social worker and a speech therapist.

Medical examinations are carried out at all public and private schools within the Territory. The total number of school children examined during the year 1967–68 was 13,679.

Defects during the year were: 1,090 eyesight, 38 ear, nose and throat, 335 cases of hearing loss, 67 speech, and 325 miscellaneous. Triple antigen injections, or combined diphtheria and tetanus vaccine totalling 11,316 in 1697–68, were given at regular sessions held throughout the year.

The School Dental Service provides free treatment for children attending infants and primary schools, both public and private, in the Australian Capital Territory. During 1968, 12,129 children were examined in Canberra and Jervis Bay schools. This service is also carrying out a detailed clinical assessment of the effects of fluoridation of Canberra's water supply.

Disposal of dead by cremation

The first crematorium in Australia was opened in South Australia in 1903. At 31 December 1968 there were twenty-four crematoria in Australia, situated as follows: New South Wales, 10; Victoria,4; Queensland, 4; South Australia, 1; Western Australia, 2; Tasmania, 2; Australian Capital Territory, 1. There is no crematorium in the Northern Territory. The following table shows the number of cremations and total deaths in each State and Territory for each of the years 1964 to 1968.

CREMATIONS AND TOTAL DEATHS: STATES AND TERRITORIES(*a*), 1964 TO 1968

	1964		*1965*		*1966*		*1967*		*1968*	
State or Territory	*Cremations*	*Total deaths*	*Cremations*	*Total deaths*	*Cremations*	*Total deaths*	*Cremations*	*Total deaths (b)*	*Cremations*	*Total deaths (b)*
New South Wales	16,321	39,487	16,651	38,949	17,733	40,546	17,486	39,613	18,749	41,803
Victoria	9,832	27,548	9,857	28,031	10,362	28,673	10,173	28,373	10,939	29,967
Queensland	4,745	14,523	4,905	14,114	5,097	14,861	5,156	14,736	5,686	16,078
South Australia	1,506	8,906	1,638	8,788	1,957	9,323	2,076	9,071	2,476	9,916
Western Australia	2,003	6,429	2,010	6,274	2,308	6,772	2,448	6.779	2,548	7,470
Tasmania	864	3,174	912	3,043	947	3,159	1,019	3.228	1,049	3,284
Northern Territory	..	164	..	161	..	154	..	527	..	543
Australian Capital Territory	..	363	..	355	(*c*)81	441	180	376	235	488
Australia	**35,271**	**100,594**	**35,973**	**99,715**	**38,485**	**103,929**	**38,538**	**102,703**	**41,682**	**109,549**

(*a*) Cremations are not necessarily carried out in the State or Territory where the death was registered. (*b*) Includes Aborigines. (*c*) Commenced operation 8 July 1966.

COMMONWEALTH GOVERNMENT ACTIVITIES

Commonwealth services outlined in the following pages are those provided under the National Health Service or otherwise administered by the Commonwealth Department of Health. For particulars of services administered by the Commonwealth Department of Social Services and of Commonwealth expenditure from the National Welfare Fund on all forms of social and health services *see* Chapter 13, Welfare Services.

At the time of federation the only health function given to the Commonwealth Government under the Constitution was the power to make laws with respect to quarantine. Following on the passing of the *Quarantine Act* 1908 a branch of the Department of Trade and Customs, under the control of a Director of Quarantine, was created on 1 July 1909. The Commonwealth Department of Health was formed in 1921 by the extension and development of the quarantine service, the Director of Quarantine becoming the Director-General of Health. An amendment to the Constitution in 1946 gave the Commonwealth power to make laws with respect to pharmaceutical, hospital and sickness benefits, and medical and dental services. In addition, the Commonwealth Government has used its powers under Section 96 of the Constitution to make grants to the States for health purposes.

National health benefits

Pharmaceutical benefits

A comprehensive range of drugs and medicines is made available to all persons receiving treatment from a medical practitioner registered in Australia. The benefits are supplied by an approved pharmacist upon presentation of a prescription, or by an approved hospital to patients receiving treatment at the hospital. The patient pays the first 50 cents of the cost of a prescription dispensed by an approved pharmacist, but pensioners who are eligible for treatment under the Pensioner Medical Service (*see* page 466) receive all benefits without any contribution being made. Special arrangements exist to cover prescriptions dispensed at locations outside the normal conditions of supply, e.g. in remote areas. Total Commonwealth expenditure on pharmaceutical benefits in the year 1967–68 was $105,134,443.

The following table sets out the number of prescriptions and expenditure on the more frequently prescribed therapeutic preparations under the Pharmaceutical Benefits Scheme for 1966–67 and 1967–68. The expenditure for both years includes patient contributions, which totalled $18,504,000 in 1967–68. Prescriptions issued free to pensioners are included, and these amounted to $32,115,336 in 1967–68. Benefits dispensed by hospitals and those covered by special arrangements are not included, these amounted to $16,218,860 in 1967–68.

PRESCRIPTIONS DISPENSED UNDER THE PHARMACEUTICAL BENEFITS SCHEME(a) 1967 AND 1968

	Year ended 30 June			
	1967		*1968*	
Therapeutic category	*Prescriptions*	*Expenditure*	*Prescriptions*	*Expenditure*
	('000)	$'000	('000)	$'000
Broad spectrum antibiotics	4,564	13,872	5,049	13,619
Drugs acting on blood vessels	2,868	9,278	3,040	10,427
Penicillins	4,216	9,500	4,353	9,338
Diuretics	2,242	7,512	2,515	8,647
Analgesics	4,286	8,729	4,362	8,448
Sedatives and hypnotics	6,792	6,893	6,651	6,476
Anti-histamines	2,974	5,223	3,342	5,828
Drugs acting on genito-urinary infections	1,087	2,663	1,246	3,201
Anti-cholinergics	813	2,871	907	3,178
Tranquillisers	803	2,339	899	2,673
Antacids	1,538	1,856	1,896	2,429
Drugs acting on heart	1,207	2,263	1,259	2,338
Anti-diabetic	553	2,038	605	2,222
Eye drops	1,048	1,663	1,152	1,823
Anti-depressants	74	324	411	1,524
Anti-convulsants	353	1,338	387	1,504
Bronchial spasm preparations	869	1,403	934	1,459
Sulphonamides	966	1,307	1,078	1,422
Gastro-intestinal sedatives	598	1,102	665	1,212
Iron preparations	920	1,025	1,027	1,151
Expectorants and cough suppressants	1,167	973	1,072	898
Other therapeutic substances	13,485	20,112	12,573	17,603
Total	**53,423**	**104,284**	**55,423**	**107,420**

(a) Excludes benefits dispensed by hospitals and those covered by special arrangements.

Hospital and nursing home benefits

The *National Health Act* 1953–1968 provides for the payment of Commonwealth hospital and nursing home benefits. Commonwealth benefits are payable only in respect of treatment received in approved hospitals, approved nursing homes and, in the case of children, in approved handicapped persons homes. For the purposes of the National Health Act, premises which provide medical treatment, care and accommodation for sick persons are approved either as hospitals or as nursing homes, depending mainly on their clinical standards and the type of patients accommodated. Usually premises are approved as hospitals if their general standards are substantially equivalent to those of a public hospital and if hospital treatment, as defined in the National Health Act, is provided. Premises are approved as nursing homes where their general standards are similar to those prevailing in benevolent homes, convalescent homes, rest homes, or homes for the aged, and if nursing home treatment as defined in the Act is provided. Approval of premises as a handicapped persons home is granted where the premises are adequately fitted, furnished, and staffed for the purpose of providing handicapped persons with appropriate care.

Patients in approved hospitals. A basic principle of the provision of benefits for patients in approved hospitals is the Commonwealth support of voluntary insurance against the costs involved. Insured patients in approved hospitals receive a Commonwealth hospital benefit of $2 a day which is paid through the contributors' registered hospital benefits organisations. Total payments by contributors to organisations range from 25 cents to 65 cents a week for single persons and from 50 cents to $1.30 a week for families. Examples of contributions and benefits payable, including Commonwealth benefits of $2 a day, are:

Weekly contributions		*Total benefits*	
Single person	*Family*	*Daily*	*Weekly*
$	$	$	$
0.25	0.50	8.00	56.00
0.30	0.60	9.20	64.40
0.40	0.80	11.60	81.20
0.55	1.10	15.20	106.40
0.65	1.30	17.60	123.20

A contribution of $1.00 a week covers a family for benefits in excess of the public ward charge in any State. Contributions are allowable deductions for income tax purposes.

During the waiting period of two months after joining an organisation the Commonwealth benefit is payable at the rate of 80 cents a day, unless the organisation pays fund benefits, in which case Commonwealth benefit is payable at the higher rate of $2 a day. While a member is in arrears with his contributions and fund benefits are not payable, the Commonwealth benefit is payable at the rate of 80 cents a day unless the member was in receipt of unemployment or sickness benefits under the *Social Services Act* 1947–1968, when the normal rate of $2 a day is payable.

Contributors who would have been excluded from fund benefits because of organisations' rules covering pre-existing ailments, chronic illnesses, or maximum benefits are assured of hospital fund benefits by the provisions of the special account plan. Since 1 January 1969 such a contributor has been entitled to receive benefit at his full insured rate, provided total benefits do not exceed the amount of the hospital charge. Benefit is paid either from the ordinary account or from a special account guaranteed by the Commonwealth. If the payments from the special account exceed contributions credited to the account, the amount of deficit is reimbursed by the Commonwealth.

A person who joins a registered hospital benefits organisation within eight weeks of being discharged from an approved nursing home is entitled to immediate Commonwealth benefit of $2 a day and to fund benefits without having to serve a waiting period. From 26 November 1968 persons ceasing to be entitled to the benefits of the Pensioner Medical Service who join a registered organisation within two months before or within three months after ceasing to be a pensioner are not required to serve the normal waiting period before becoming eligible for fund benefits. This new provision also enables such contributions to be transferred to the special account. If a qualified patient in an approved hospital is not insured (i.e. not a member of a hospital benefits organisation), a Commonwealth benefit of 80 cents a day is deducted from his account by the hospital. The Commonwealth subsequently reimburses the hospital. Under arrangements made under the National Health Act public hospitals generally provide free public ward treatment to pensioners enrolled in the Pensioner Medical Service who are classified as public ward patients. The Commonwealth pays the hospitals a benefit of $5 a day for each pensioner patient.

Patients in approved nursing homes. The Commonwealth nursing home benefit of $2 a day is payable in respect of all qualified patients in approved nursing homes, whether the patients are insured or not. This benefit is deducted from the patient's account and subsequently paid by the Commonwealth to the nursing home. If no charge is made by the nursing home, the Commonwealth nursing home benefit of $2 a day is still payable to the nursing home in respect of qualified patients. From 1 January 1969 there has been payable in addition to the above mentioned benefit, a supplementary Commonwealth benefit of $3.00 per day in respect of those qualified patients in approved nursing homes who are in need of and who are receiving intensive nursing home care.

There is no need for patients in approved nursing homes to be insured with a registered hospital benefits organisation, fund benefits being generally not payable. However, the National Health Act provides that where an insured special account patient is treated in an approved nursing home for an illness or injury requiring hospital treatment of the kind provided in an approved hospital and is given treatment equivalent to that which he would have received in an approved hospital, approval may be given to the payment of special account fund benefits.

Handicapped children in approved handicapped persons homes. Since 1 January 1969, handicapped children who are under sixteen years of age and who are accommodated overnight in an approved handicapped persons home have been entitled to a Commonwealth benefit of $1.50 per day. The benefit is paid direct to the approved handicapped persons home and an equivalent amount is deducted from any charge raised by the home in respect of the handicapped child. The benefit applies to both physically and mentally handicapped children and is payable to homes conducted by charitable and religious organisations. It is not payable to homes conducted by a State Government or those conducted by a person or organisation for profit. There is no necessity for handicapped children in an approved handicapped persons home to be insured with a registered benefit organisation.

Australians overseas. Australian residents who receive hospital treatment in recognised hospitals in overseas countries, while temporarily absent from Australia, are eligible to receive the Commonwealth and fund benefits to which they would be entitled if the treatment were given in Australia.

Expenditure on hospital and nursing home benefits. The following table shows the amount of Commonwealth hospital and nursing home benefits paid during 1967–68. This does not include expenditure on mental hospitals (*see* page 465).

COMMONWEALTH HOSPITAL AND NURSING HOME BENEFITS PAID STATES AND TERRITORIES, 1967-68

($'000)

Type of patient	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Uninsured patients (80c)	619	405	879	103	153	47	80	12	2,298
Insured patients ($2)(*a*)	8,477	4,872	2,176	1,998	1,620	664	(*b*)	(*b*)	19,807
Pensioner patients ($3.60)	8,871	5,272	4,259	1,969	2,316	783	39	156	23,665
Nursing home patients ($2)	10,388	5,121	3,753	(*c*)2,202	2,222	800	(*c*)	..	24,486
Total	**28,355**	**15,670**	**11,067**	**6,272**	**6,311**	**2,294**	**119**	**168**	**70,256**

(*a*) Excludes payments of $4,493,625 towards special accounts deficits in 1967–68 (*b*) Members who live in the Northern Territory or the Australian Capital Territory, or who are abroad, receive their Commonwealth benefit and fund benefit through membership of an organisation registered in one of the States, and payments to them are included in the respective States. (*c*) South Australia includes Northern Territory.

Registered hospital benefits organisations. The following table shows the number of registered hospital benefits organisations, the membership at 30 June 1968, and fund benefits paid during 1967–68. As many persons contribute on behalf of both themselves and their dependants, the total number of persons covered by hospital benefit schemes is considerably higher than the number of members.

HOSPITAL BENEFITS: ORGANISATIONS AND FUND BENEFITS, STATES, 1967-68

		N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*(*a*)
Registered organisations at 30 June 1968(*b*)		32	42	4	13	9	9	109
Membership at 30 June 1968	('000)	1,449	1,092	317	411	293	118	3,680
Fund benefits paid(*c*)	($'000)	37,353	21,353	5,197	7,921	7,033	2,932	81,789

(*a*) Members who live in the Northern Territory or the Australian Capital Territory, or who are abroad, receive their Commonwealth benefit and fund benefit through membership of an organisation registered in one of the States, and payments to them are included in the respective States. (*b*) Excludes interstate branches. (*c*) Includes $2,878 736 ancillary benefits.

Grants to mental hospitals

In 1946, when Commonwealth hospital benefits were introduced for patients in public hospitals, no provision was made for patients in mental hospitals. To help meet the cost of maintaining patients in mental hospitals the Commonwealth Parliament passed the *Mental Institutions Benefits Act* 1948. This Act ratified agreements with the States, whereby it was provided that the States would cease making charges for the maintenance of mental patients and that the Commonwealth would pay the States a benefit based on the amount which had been collected by the States from the relatives of patients in mental hospitals by way of charges for maintenance.

These agreements operated for five years and terminated in the latter half of 1954. The amount contributed by the Commonwealth during the operation of the agreements was approximately one shilling (10 cents) a day for each patient. When the agreements terminated, Dr Alan Stoller, of the Victorian Mental Hygiene Authority, was commissioned to undertake a survey of mental health facilities and needs in Australia. His report, issued in May 1955, stated that serious overcrowding existed in the majority of mental hospitals in Australia. The provision of more beds was the most urgent need, but other accommodation and rehabilitation facilities were also required.

Following the report, the Commonwealth made an offer of $20 million to the States as part of a capital expenditure programme of $60 million on increasing and improving patient accommodation. All States accepted the Commonwealth offer. By 1963 more than three-quarters of the total grant under the *States Grants (Mental Institutions) Act* 1955 had been distributed and the Commonwealth Government announced in November 1963 its intention of continuing assistance to the States towards capital costs on a similar basis, but without overall limit, for a period of three years. In May 1964 the *States Grants (Mental Health Institutions) Act* 1964 was passed to implement that policy. This Act provided for the continuation of Commonwealth aid of $1 for every $2 of capital expenditure by the States on mental health facilities for the three-year period ending 30 June 1967. With the passing of the *States Grants (Mental Health Institutions) Act* 1967, this date has been extended to 30 June 1970. The following table sets out the amounts which have been paid to the State Governments by the Commonwealth Government from 1963–64 to 1967–68.

EXPENDITURE ON MENTAL HOSPITALS BY THE COMMONWEALTH GOVERNMENT: STATES, 1963–64 TO 1967–68
($'000)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
1963–64	982	..	108	173	332	..	1,595
1964–65(*a*) . . .	659	711	225	265	447	197	2,504
1965–66	1,717	1,567	146	242	338	529	4,539
1966–67	2,217	1,192	288	193	260	823	4,973
1967–68	2,095	1,381	196	63	148	358	4,243
Total, 1963-64 to 1967-68	**7,671**	**4,853**	**963**	**936**	**1,524**	**1,907**	**17,853**

(*a*) Expenditure for 1964–65 includes final grants, totalling $406,454, made under the 1955 Act as follows: New South Wales, $274,938; Queensland, $21,210; and South Australia, $110,306.

There are no mental hospitals in the Northern Territory or in the Australian Capital Territory.

Medical benefits

A medical benefits scheme has operated since July 1953, being authorised firstly by the National Health (Medical Benefits) Regulations and then by the *National Health Act* 1953–1968. The basic principle of the scheme is Commonwealth support of voluntary insurance towards meeting the costs of medical attention. The benefits provided by the Commonwealth are paid either on a fee-for-service basis in respect of the items set out in the schedule to the National Health Act or in the form of a subsidy not exceeding half of the payments made to doctors by registered organisations under contract arrangements.

Commonwealth fee-for-service benefits are paid in accordance with the list of benefits set out in the schedule to the *National Health Act* 1953–1968. The present schedule came into force on 1 March 1968.

In order to qualify for a Commonwealth benefit a person is required to be insured with a registered medical benefit organisation. The organisation pays the Commonwealth benefit to the contributor, usually at the time it pays its own benefit. Reimbursement of the Commonwealth benefit is subsequently made to the organisation by the Commonwealth.

Commonwealth benefits ranging from 80 cents for ordinary general practitioner visits to $60 for major operations are payable to members of registered medical benefit organisations. The fund benefit payable varies according to the weekly contributions paid by the member and the particular medical service. Weekly contributions to a medical benefits fund range from 20 cents to 30 cents for a single person and from 40 cents to 60 cents for a married contributor. Examples of the range of benefits are as follows.

Type of service	*Combined Commonwealth and fund benefits* $
Certain major operations	120.00–180.00
Appendix operation	40.00– 45.00
Confinement including anti-natal and post-natal care .	30.00– 33.75
Tonsils (under 12 years)	14.00– 15.75
Simple fracture of wrist	14.00– 15.75
General practitioner consultation (surgery) . . .	1.60– 2.00
General practitioner consultation (home) . . .	1.60– 2.40

From 26 November 1968 persons ceasing to be entitled to the benefits of the Pensioner Medical Service who join a registered organisation within two months before or within three months after ceasing to be a pensioner are not required to serve the normal waiting period before becoming eligible for fund benefits. This new provision also enables such contributors to be transferred to the special account.

Provision is made for the payment of fund benefit from special account for claims lodged by contributors who have reached maximum benefits or who make claims in respect of pre-existing ailments. The medical special accounts are operated along the same principles as the hospital special accounts (*see* pages 462–3) and the special account fund benefit paid usually matches the Commonwealth benefit for the particular service.

Australians overseas. Australian residents temporarily absent from Australia who receive medical attention by registered medical practitioners in the country they are visiting are entitled, if insured, to the Commonwealth benefit and the medical fund benefit to which they would be entitled if the service were rendered in Australia.

Expenditure on medical benefits. The following table shows the number of registered medical benefit organisations, their membership, the number of medical services rendered to members and their dependants, and payments of Commonwealth benefits and medical fund benefits to members of registered organisations. As many persons contribute on behalf of both themselves and their dependants, the total number of persons covered by medical benefit schemes is considerably higher than the number of contributors. At 30 June 1968 the estimated number of persons covered by contributory medical schemes was 8,817,000.

MEDICAL BENEFITS: SUMMARY, STATES, 1967-68

		N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.(a)*
Registered organisations(*b*)(*c*)	No.	28	19	6	8	8	9	78
Members(*c*)	'000	1,350	1,010	316	381	284	115	3,456
Medical services	'000	12,527	8,602	3,382	3,923	2,595	962	31,991
Commonwealth benefit(*d*)	$'000	17,613	12,183	4,499	5,721	4,013	1,446	45,475
Fund benefit(*e*)	$'000	22,602	13,167	5,151	5,869	4,268	1,519	52,576

(*a*) Members who live in the Northern Territory or the Australian Capital Territory, or who are abroad, receive their Commonwealth benefit and fund benefit through membership of an organisation registered in one of the States. (*b*) Excludes interstate branches. (*c*) At end of period. (*d*) Excludes payments of $956,000 towards special accounts deficits. (*e*) Includes $2,244,000 ancillary fund benefits.

Pensioner Medical Service

The Pensioner Medical Service, which commenced on 21 February 1951, was introduced under the authority of the National Health (Medical Services to Pensioners) Regulations made under the provisions of the *National Health Services Act* 1948–1949. The service has been continued under the provisions of the *National Health Act* 1953–1968. The service provided to eligible pensioners consists of medicine provided free of charge and a medical service of a general practitioner nature such as that ordinarily rendered by a general medical practitioner in his surgery or at the patient's home. Specialist services are not provided. Patients may be charged a small fee by doctors for travelling and attendance outside normal surgery or visiting hours. Doctors participating in the scheme are paid on a fee-for-service basis by the Commonwealth Government.

Persons eligible to receive the benefits of the Pensioner Medical Service are those receiving a full or part age, invalid or widow's pension under the *Social Services Act* 1947–1968; a full or part service pension under the *Repatriation Act* 1920–1968; a sheltered employment allowance under the *Social Services Act* 1947–1968; or an allowance under the *Tuberculosis Act* 1948; and their dependants.

At 30 June 1968 the total number of pensioners and dependants enrolled in the Pensioner Medical Service was 1,114,541, while the number of doctors participating in the scheme at that date was 6,333. During 1967–68 doctors in the scheme provided 8,654,389 services—visits and surgery consultations—for persons enrolled in the scheme. For these services they were paid $16,114,752. The average number of services rendered by doctors to each enrolled person was 7.9.

Anti-tuberculosis campaign

The main provisions of the *Tuberculosis Act* 1948 are as follows: (*a*) Section 5 authorises the Commonwealth to enter into an arrangement with the States for a national campaign against tuberculosis; (*b*) Section 6 empowers the Commonwealth to take over or provide specified facilities for the diagnosis, treatment, and control of tuberculosis; (*c*) Section 8 provides for the setting up of an advisory council to advise the Commonwealth Minister for Health on matters relating to the national campaign; and (*d*) Section 9 authorises the Commonwealth to pay allowances to sufferers from tuberculosis and to their dependants.

Under an arrangement with the Commonwealth Government, each State conducts a campaign against tuberculosis. The Commonwealth Government reimburses the State for all approved capital expenditure in relation to tuberculosis, and for net maintenance expenditure to the extent that it exceeds net maintenance expenditure for the year 1947–48. Thus the States carry out the physical or field work of the national campaign and the Commonwealth acts in an advisory, co-ordinating, and financial capacity. For this reason the Commonwealth has not found it necessary to make much use of its powers under Section 6 of the Tuberculosis Act. An advisory council, known as the National Tuberculosis Advisory Council, has been set up. There are twelve members, the chairman being the Commonwealth Director-General of Health.

To help reduce the spread of infection the Commonwealth Government pays allowances to persons suffering from infectious tuberculosis, so that they may give up work and undergo treatment. These allowances have been in operation since 13 July 1950. The rates now payable are: married sufferer with a dependent wife, $28.25 a week; sufferer without a spouse but with a dependent child or children, $18.00 a week; dependent child or children under sixteen years of age and full-time student children from sixteen to twenty-one years, $2.50 a week for each dependent child (additional to child endowment); sufferer without dependants, $17.25 a week (reducible to $14.00 a week if a person is maintained free of charge in an institution).

There is a means test on income but not on property. The allowance is reduced by the amount by which a person's income from sources other than his allowance exceeds, in the case of a person receiving the married person rate, $17.00 a week; a person who is without a spouse or dependent female and is entitled to a 'single person' rate, $10.00 a week; and a person with a spouse but who is not entitled to a 'married person' rate, $8.50 a week.

New tuberculosis cases notified. The following table gives particulars of the number of new cases of tuberculosis notified in Australia for 1968.

TUBERCULOSIS: NEW CASES NOTIFIED(*a*), STATES AND TERRITORIES, 1968

State or Territory	*Age group (years)*					
	0–14	*15–34*	*35–54*	*55 and over*	*Not stated*	*Total*
New South Wales	49	128	310	362	1	850
Victoria	53	111	175	196	..	535
Queensland	26	74	170	206	3	479
South Australia	11	19	32	48	..	110
Western Australia	18	44	46	43	..	151
Tasmania	..	11	25	15	..	51
Northern Territory	2	10	21	10	..	43
Australian Capital Territory	..	4	4	6	..	14
Australia	**159**	**401**	**783**	**886**	**4**	**2,233**

(*a*) Figures supplied by the Director of Tuberculosis in each State.

Commonwealth expenditure. Expenditure by the Commonwealth Government on its anti-tuberculosis campaign is set out in the following tables. The figures for maintenance differ from those in the table shown in the chapter Welfare Services because they include administrative costs, which are not a charge on the National Welfare Fund.

COMMONWEALTH EXPENDITURE ON ANTI-TUBERCULOSIS CAMPAIGN STATES AND TERRITORIES, 1967-68

($'000)

State or Territory	*Allowances*	*Maintenance (a)*	*Capital*	*Total*
New South Wales	364	3,864	591	4,819
Victoria	251	3,395	10	3,656
Queensland	285	2,394	136	2,815
South Australia	80	651	31	762
Western Australia	55	844	10	909
Tasmania	38	360	3	401
Northern Territory	17	..	..	17
Australian Capital Territory	2	2	..	4
Australia	**1,091**	**11,511**	**780**	**13,382**

(*a*) Includes $242,000 for administrative costs.

COMMONWEALTH EXPENDITURE ON ANTI-TUBERCULOSIS CAMPAIGN: AUSTRALIA, 1963-64 TO 1967-68

($'000)

Year	*Allowances*	*Maintenance (a)*	*Capital*	*Total*
1963–64	1,593	10,679	598	12,871
1964–65	1,458	10,354	696	12,508
1965–66	1,286	13,586	696	15,569
1966–67	1,193	11,247	499	12,939
1967–68	1,091	11,511	780	13,382

(*a*) Includes administrative costs.

Anti-poliomyelitis campaign

Information concerning the initial production by the Commonwealth Government in 1955 of anti-poliomyelitis vaccine in Australia, and of the testing procedures which were carried out, is contained in Year Book No. 49 and earlier issues. Information regarding the campaign against poliomyelitis, using Salk vaccine, is contained in Year Book No. 53 (page 560) and in earlier issues.

Following a recommendation of the National Health and Medical Research Council in May 1966, all States except Victoria indicated that Sabin oral vaccination campaigns would be commenced during 1967. Sabin vaccine is now in use in all States and Territories.

Sabin vaccine is taken by mouth. Three doses of vaccine are given at intervals of at least eight weeks.

New cases of poliomyelitis notified. The numbers of new cases of poliomyelitis notified, and confirmed by the Poliomyelitis Sub-committee of the National Health and Medical Research Council, are shown for each State and Territory for each year from 1964 to 1968 in the following table.

POLIOMYELITIS: NEW CASES NOTIFIED, STATES AND TERRITORIES, 1964 TO 1968

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1964	1	6	..	..	..	..	..	..	7
1965	3	..	..	..	..	1	..	..	4
1966	..	..	1	..	..	..	..	..	1
1967	..	1	..	..	..	..	..	..	1
1968	..	1	1	..	..	1	..	..	3

Free milk for school children scheme

The *States Grants (Milk for School Children) Act* 1950 was passed with the object of improving the diet of school children by the addition of a small quantity of milk each day. All children under the age of thirteen years attending government or non-government primary schools, including nursery schools, kindergartens, crèches and missions for Aborigines, are eligible to receive free milk. The cost of the milk and half the capital or incidental costs, including administrative expenses of the scheme, are reimbursed by the Commonwealth to the States. All States now participate in the scheme. At 30 June 1968 approximately 1,819,000 children were entitled to receive free milk under this scheme. Expenditure by the Commonwealth Government during the years 1963–64 to 1967–68 was as follows.

COMMONWEALTH EXPENDITURE ON MILK FOR SCHOOL CHILDREN SCHEME STATES AND TERRITORIES, 1963-64 TO 1967-68

($'000)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1963–64	2,663	2,186	1,120	708	618	399	50	55	7,799
1964–65	2,881	2,069	1,215	760	640	389	72	60	8,085
1965–66	2,916	2,386	1,259	801	622	408	56	74	8,521
1966–67	3,073	2,394	1,400	860	701	451	77	93	9,049
1967–68	3,357	2,628	1,376	955	853	511	75	106	9,861

The figures in the foregoing table differ slightly from those in the table shown in Chapter 13, Welfare Services, as they include capital and administrative costs. Figures in the latter table represent only expenditure which is a charge on the National Welfare Fund, i.e. the cost of the milk.

Commonwealth organisations concerned with health

This section summarises the activities of various Commonwealth organisations concerned with public health. More detailed information on the function and operations of these organisations is given in Year Book No. 53, pages 561–6, and in the annual reports of the Commonwealth Director-General of Health.

The National Health and Medical Research Council was established in 1936 to replace the National Health Council. Its main functions are to advise Commonwealth and State Governments on all matters of public health legislation and administration, on matters concerning the health of the public, and on medical research. It also advises the Commonwealth and State Governments on the merits of reputed cures or methods of treatment which are from time to time brought forward for recognition. The Council advises the Commonwealth Minister for Health on the application of expenditure from the Medical Research Endowment Fund which was established under the *Medical Research Endowment Act* 1937 to provide assistance to Departments of the Commonwealth or of a State engaged in medical research; to universities for the purpose of medical research; to institutions and persons engaged in medical research; and in the training of persons in medical research. The Commonwealth makes an annual appropriation for the Fund, the 1967–68 appropriation being $1,308,463 and that for 1968–69, $1,576,000.

The National Biological Standards Laboratory was set up under the *Therapeutic Substances Act* 1953–1959 which empowers the Commonwealth to ensure that therapeutic substances used for the prevention, diagnosis, and treatment of disease in man and animals are safe, pure, and potent. The Commonwealth Director-General of Health is authorised under the Act to set up laboratories to test such substances. Of the 1,621 samples examined by the Laboratory during 1967–68, 476 failed to meet the required standards. In addition, 586 safety tests were performed, 64 were failed and 10 were deferred for further testing. Administrative costs for 1967–68 were $559,060, and $76,888 was expended on plant and equipment.

The Commonwealth Serum Laboratories are controlled by the Commonwealth Serum Laboratories Commission, which is a body corporate established under the *Commonwealth Serum Laboratories Act* 1961–1966. The main functions of the Commission are to produce and sell prescribed biological products used for therapeutic purposes and to ensure the supply of prescribed essential biological products in accordance with national health needs. These functions include research and development relating to prescribed biological products and allied fields, and the maintenance of potential production capacity for use in emergencies. The Commission is expected under the Act to generate sufficient revenue from the sale of its commercial products to finance its activities relating to prescribed biological products. Certain services, determined by the Minister for Health from time to time, are payable by the Commonwealth. This includes reimbursement for the issue of a wide range of blood products which are processed from whole blood supplied by the Australian Red Cross Blood Transfusion Services and distributed throughout Australia free of charge for medical purposes.

Fifteen *Commonwealth Health Laboratories* have been established under the *National Health Act* 1953–1968, principally in country areas throughout Australia, to provide facilities for the investigations into public health and preventive medicine and to assist local medical practitioners in the investigation and diagnosis of disease. The laboratories are situated in the following centres: Albury, Alice Springs, Bendigo, Cairns, Canberra, Darwin, Hobart, Kalgoorlie, Launceston, Lismore, Port Pirie, Rockhampton, Tamworth, Toowoomba, and Townsville. During 1967–68 these laboratories performed 3,760,966 examinations and tests (Nuffield points score system) in respect of 603,624 patients. Administrative costs were $1,306,933 and expenditure on plant and equipment was $135,869.

The *Commonwealth Acoustic Laboratories* were established under the *Acoustic Laboratories Act* 1948 to undertake scientific investigations into hearing and problems associated with noise as it affects individuals. The laboratories also provide assistance in the general aural rehabilitation of ex-service personnel and school and pre-school children. The provision and maintenance of hearing aids is available free of charge to persons under twenty-one years of age, but replacement batteries must be purchased by those in remunerative employment. In April 1968 a hearing aid service was made available to pensioners for a nominal fee of $10. To qualify for assistance persons should be receiving an age, invalid or widow's pension or a sheltered employment allowance under the Social Services Act, a service pension under the Repatriation Act or an allowance under the Tuberculosis Act. Dependants of eligible persons are also entitled to the service. The cost of these services is met from the National Welfare Fund. The laboratories' functions also include the provision and maintenance of hearing aids on behalf of the Repatriation and other Commonwealth Departments. During 1967–68 the number of new cases examined at the laboratories was 18,271, including 7,756 children, 4,772 repatriation cases, 1,252 members of the defence forces, 1,190 pensioners and 1,425 civil aviation referrals; 6,596 Calaid hearing aids were fitted and 27,830 maintained. The cost of supply and maintenance of hearing aids to pensioners and persons under twenty-one years of age was $351,267. Administrative costs of the laboratories were $604,585 and expenditure on plant and equipment $177,163.

The *Commonwealth X-ray and Radium Laboratory* was originally established in 1929 as the Commonwealth Radium Laboratory, and has served from that time as the Commonwealth centre for radiological physics and as custodian of all Commonwealth-owned radium used for medical purposes. The laboratory's functions have expanded over the years to include the physical aspects of X-rays; the distribution of all radio-isotopes used in Australia for medical purposes; the maintenance of facilities for radio-chemical investigation; and the assay of radioactive substances in the Australian environment. The laboratory also provides assistance in matters relating to protection against ionising radiations and operates a film-badge service to monitor the radiation exposure of those who work with such radiation. In 1967–68 there were 2,625 deliveries of radio-isotopes, including 48 different isotopes procured for use in medicine and medical research. Of these, 370 deliveries were obtained from the Australian Atomic Energy Commission. Free issues for medical diagnosis and therapy supplied for patients throughout Australia were 64,237, the cost of $155,000 being met from the National Welfare Fund. Film badges, numbering 77,301, were processed, assessed, and reported on. During 1966–67 an arrangement was made whereby the laboratory supplies radon direct to New Zealand users, and it was decided to install a whole-body monitor for use in investigation on the radio activity of selected samples and patients. Administrative costs for 1967–68 were $264,136 and $52,533 was expended on plant and equipment.

The *School of Public Health and Tropical Medicine* was established in 1930 by the Commonwealth Government at the University of Sydney under an agreement with that University. It provides training for medical graduates and students in public health and tropical medicine in addition to research and consultative activities in these and allied fields. During 1967–68, 13 diplomas were awarded in Public Health and 9 in Tropical Medicine and Hygiene. Costs met by the Commonwealth during 1967–68 were $543,913 for administration and $35,629 for plant and equipment.

The *Institute of Child Health* is associated with the School of Public Health at the University of Sydney and with the Royal Alexandria Hospital for Children at Camperdown. Its activities include research into medical and social problems of childhood, undergraduate and post-graduate teaching at the University of Sydney and collaboration with other national and international organisations concerned with child health and disease. Costs of the Institute paid by the Commonwealth during 1967–68 were $110,365 for administration and $77,048 for plant and equipment.

The *Commonwealth Bureau of Dental Standards* operates under Section 9 of the *National Health Act* 1953–1968. It is part of the Commonwealth Department of Health and is concerned with research, standards and testing related to dental and allied materials and processes. Its functions include the provision of a consultative service and testing facilities for manufacturers and distributors of dental materials. The number of these products tested during 1967–68 was 200. Expenditure on plant and equipment was $14,120.

The *Australian Institute of Anatomy* is also part of the Commonwealth Department of Health and a number of Health Department sections are located in the Institute building. The scientific research work of the Institute is mostly concentrated on problems of nutrition by field surveys of dietary status and laboratory investigation into the biochemistry of nutrition and metabolism. During 1967–68 work continued to be directed towards nutritional problems in the Territory of Papua and New Guinea. The Institute also contains a museum section which includes a display of anatomical specimens and models.

Control of infectious and contagious diseases

The provisions of the various Acts with regard to the compulsory notification of infectious diseases and the precautions to be taken against their spread are dealt with under the headings of quarantine and notifiable diseases.

Quarantine

The *Quarantine Act* 1908–1968 is administered by the Commonwealth Department of Health and has three sections of disease control, as follows: (i) human quarantine, which ensures that persons arriving from overseas are free of quarantinable disease; (ii) animal quarantine, which controls the importation of animals and animal products from overseas and the security of other animals present on vessels in Australian ports; and (iii) plant quarantine, which regulates the conditions of importation of all plants and plant products with the object of excluding plant diseases, insect pests and weeds.

In respect of interstate movements of animals and plants, the Act becomes operative only if the Governor-General considers that Commonwealth action is necessary for the protection of any State or States, and in general the administration of interstate movements of animals and plants is left in the hands of the States.

Human quarantine. All passengers and crews arriving in Australia from overseas, whether by air or sea, are subject to a medical inspection for the purpose of preventing the introduction of disease into Australia. At the major ports full-time quarantine officers carry out the work, but in the minor ports local doctors act as part-time quarantine officers. In each State, quarantine activities are controlled by the Commonwealth Director of Health, who is a senior medical officer of the Commonwealth Department of Health.

The main concern of the examining officers is to detect cases of the quarantinable diseases smallpox, cholera, yellow fever, plague, and typhus fever. These diseases are not endemic to Australia and it is of great importance to prevent their entry. Quarantine stations at the major ports and at Darwin and Townsville are kept ready for occupation at all times. In addition, persons arriving in Australia and suffering from infectious diseases such as chicken pox, mumps, scarlet fever, and measles are directed to appropriate care and placed in isolation where necessary.

Valid vaccination certificates are required of travellers to Australia as follows.

Cholera. All arrivals from locally infected areas and from India, Pakistan, Burma, Thailand, Vietnam, Philippines, Malaysia, and Indonesia. No certificate is required in respect of children under one year of age.

Yellow fever. All arrivals from yellow fever endemic zones.

Smallpox. All arrivals from all countries except Antarctic Territories, British Solomon Islands, Christmas (Indian Ocean) and Cocos (Keeling) Islands, Fiji, Gilbert and Ellice Islands Colony (including Ocean and Fanning Islands), Lord Howe Island, Nauru, New Zealand, Norfolk Island, Australian Territory of Papua and New Guinea and Tonga Islands, provided travellers have not been outside these areas for at least fourteen days before arrival and that these areas are free from smallpox. Australia reserves the right, in respect of arrivals from other countries, to isolate any person who arrives by air without a smallpox vaccination certificate and refuses to be vaccinated. Children under one year of age are exempt. For passengers arriving in Australia by sea, exemption is granted to infants under twelve months of age and to persons who hold religious convictions against vaccination or who are suffering from a medical condition certified by a medical practitioner to contra-indicate smallpox vaccination.

All passengers, whether they arrive by sea or air, are required to give their intended place of residence in Australia, so that they may be traced if a case of disease occurs among the passengers on the aircraft or ship by which they travelled to Australia.

Isolation. Under the Quarantine Act, airline and shipping operators are responsible for the expenses of isolation of all travellers who disembark and (i) have come from a cholera infected area, or a cholera area specified above, within five days and do not possess a cholera vaccination certificate; or (ii) have come from an endemic zone within six days and do not possess a yellow fever vaccination certificate; or (iii) arrive by air without a smallpox vaccination certificate and refuse to be vaccinated on arrival.

The numbers of cases of infectious (non-quarantinable) diseases which were discovered among the passengers and crew of overseas vessels and aircraft calling at Australian ports during 1967–68 and during the preceding four years are shown in the following tables.

HUMAN QUARANTINE: CASES OF INFECTIOUS (NON-QUARANTINABLE) DISEASES ON OVERSEAS VESSELS AND AIRCRAFT CALLING AT AUSTRALIAN PORTS, 1967-68

Disease	*Number of overseas vessels and aircraft on which cases were found*	*Number of cases of infectious disease*	
		Passengers	*Crew*
Chicken pox	19	59	5
Glandular fever	1	..	2
Infectious hepatitis	3	3	..
Influenza	2	4	2
Measles	22	195	..
Mumps	7	15	..
Paratyphoid	1	1	..
Rubella	5	31	..
Salmonella infection	1	1	..
Scarlet fever	1	1	..
Typhoid fever	1	2	..
Venereal Disease—			
Gonorrhoea	175	..	207
Syphilis			16
Other			57
Total	**(*a*) 238**	**312**	**289**

(*a*) On some vessels there were cases of more than one disease.

HUMAN QUARANTINE: OVERSEAS VESSELS AND AIRCRAFT ARRIVING IN AUSTRALIA AND CASES OF INFECTIOUS (NON-QUARANTINABLE) DISEASES FOUND, 1963-64 TO 1967-68

Year	*Number of overseas vessels and aircraft cleared*		*Number of overseas vessels and aircraft on which cases were found*	*Number of cases of infectious disease*	
	Ships	*Aircraft*		*Passengers*	*Crew*
1963–64	3,184	2,620	92	361	11
1964–65	3,359	2,936	107	333	19
1965–66	3,488	3,297	201	360	122
1966–67	4,040	3,918	246	523	172
1967–68	4,440	4,968	238	312	289

Animal quarantine. Animal quarantine, authorised by the provisions of the *Quarantine Act* 1908–1968, aims at preventing the introduction or spread of animal diseases. It covers the importation of all animals, raw animal products and biological cultures associated with animal diseases, and goods associated with animals.

Of the domesticated animals, only horses, dogs, cats, and poultry are admitted from a limited number of countries depending on diseases being absent in the country of origin. All must be accompanied by health certificates which include prescribed tests. On arrival in Australia, they are subject to quarantine detention. Zoological specimens are imported into registered zoos, where they remain in permanent quarantine. Circuses are also registered if exotic species of animals are kept. In a similar manner, animals for scientific purposes are imported to approved laboratories. All these premises are kept under constant surveillance. Raw animal products such as hair, types of wool, skins, and hides are specially treated under quarantine control. Such items as raw meat, sausage casings and eggs, which cannot be sterilised, are admitted from very few countries. Other items, such as harness fittings, fodder and ship's refuse, are treated to destroy any possible infection. Special attention is given to the importation of biological substances of animal origin. The Animal Quarantine Service is also responsible for the health certification of animals for export overseas in accordance with the requirements of the various countries.

The Division of Veterinary Hygiene was created in 1926 to deal with the administration of animal quarantine. The central administration is situated within the Health Department at Canberra, with a director, an assistant director and veterinary officers. The Principal Veterinary Officer of the Department of Agriculture in each State is appointed Chief Quarantine Officer (Animals) of that State, and members of his staff Quarantine Officers (Animals). These State officers carry out the quarantine policy formulated by the central administration. Quarantine accommodation is provided in permanent animal quarantine stations at each capital city.

The Division participates in world-wide international notifications of the more serious contagious diseases of animals and maintains a census of such diseases throughout the world. Information regarding animal diseases and parasites in Australia is also collected and disseminated by means of service publications. Consultation on technical matters is maintained with various scientific institutions, notably the Commonwealth Scientific and Industrial Research Organisation. In matters of policy and the quarantine control of imports there is a close liaison with the Department of Customs and Excise.

The Division collaborates with the General and Plant divisions of the quarantine service. Many diseases of animals are communicable to man, and for this reason animal and general quarantine administration are in some respects inseparable. Similarly the interests of animal and plant divisions overlap, many items such as insects, fodder and straw being the subject of combined control.

Plant quarantine. Since 1 July 1909 the importation into Australia of all plants or parts of plants, cuttings, seeds, and fruits, whether living or dead, has been subject to an increasingly stringent quarantine with the object of preventing the introduction of insect pests, plant diseases and weeds not yet established in this country. Under the *Quarantine Act* 1908–1968, quarantine inspectors are required to examine all plant material at the first port of entry and to release only material free from diseases and pests. Everyone entering Australia is required to declare if he or she has any plant material in luggage or personal effects. Heavy penalties are laid down for those found evading the regulations. All plant material entering as cargo must also be declared.

When the Commonwealth became responsible for all plant quarantine as applied to the entry of plants and plant material into Australia, the State Governments agreed to co-operate by providing and maintaining inspection facilities and personnel, for which they are reimbursed by the Commonwealth. In 1921 the administration of the regulations came under the newly-formed Department of Health, and in 1927 the Plant Quarantine Branch was created. It is controlled by a director who is responsible for policy and legislation and for co-ordinating the work of the State officers who carry out the detailed administration in their capacity as Commonwealth officers.

Any plant material found carrying diseases or pests, or suspected of doing so, may be ordered into quarantine for remedial treatment. If treatment or return to sender is impracticable, the material may be destroyed. The cost of treatment is met by the importer. Regulations governing the different types of plants are based on the following broad principles. Importation of plants likely to be infected with plant diseases or pests, of noxious plants or fungi, and of poison plants is prohibited. Agricultural seed, not restricted under quarantine legislation, must conform to standards of purity and insect pest and disease freedom. Seed of commercial crops which could introduce diseases are prohibited imports except with special permission. All plant products not specifically restricted, such as timber, logs and crates, are subject to inspection upon arrival and treatment if necessary. Many commodities, including hops, cotton, peanuts in shell, potatoes, and certain crop seeds, may be imported only by approved importers under specified conditions. All nursery stock, including bulbs, must be grown in post-entry quarantine. Prior approval is necessary, and such material may be imported only by approved importers who are registered for this purpose. The number of plants which may be imported in any one year is limited. The importation of propagating material of commercial fruits, vines, and berries is permitted only after special prior approval and is subject to specific screening for virus by qualified authorities. Soil is a prohibited import, and any vehicles or goods contaminated with soil are required to be thoroughly cleaned, at the expense of the importer, before entry is permitted. (In order to prevent the spread of plant diseases and pests already in Australia, the various State Governments administer plant quarantine regulations under which the movement of certain plant materials or fruits from one State to another or to certain specified districts within a State is controlled.)

Notifiable diseases

Methods of prevention and control. Provision exists in the Health Acts of all States for the compulsory notification of certain infectious and other diseases and for the application of preventive measures. When any such disease occurs the local authority must be notified at once, and in some States notification must be made also to the Health Department.

As a rule, the local authorities are required to report from time to time to the Central Board of Health in each State on the health, cleanliness and general sanitary state of their several districts and on the appearance of certain diseases. Regulations provide for the disinfection and cleansing of premises and for the disinfection or destruction of bedding, clothing or other articles which have been exposed to infection. Regulations also provide that persons suspected to be suffering from, or to be carriers of, infectious disease must submit to clinical and laboratory examination. Persons suffering from certain diseases, for example, smallpox and leprosy, are detained in isolation.

Notifiable diseases and cases notified, 1968. The following table shows, by State and Territory, the number of cases notified in 1968 for those diseases notifiable in all States and Territories. In May 1965 the National Health and Medical Research Council at its Fifty-ninth Session proposed a basic list of diseases to be notifiable in each State and Territory, and this table is based upon that proposal. The table does not include all diseases which are notifiable in a State or Territory. Factors such as the following affect both the completeness of the figures and the comparability from State to State and from year to year: availability of medical and diagnostic services; varying degrees of attention to notification of diseases; and enforcement and follow-up of notifications by Health Departments.

NOTIFIABLE DISEASES(*a*): NUMBER OF CASES NOTIFIED STATES AND TERRITORIES, 1968

Disease	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Anthrax	3	..	..	..	..	..	..	..	3
Brucellosis	12	133	7	..	1	1	..	..	154
Diphtheria	14	14	..	..	1	..	..	..	29
Gonorrhoea	4,854	1,559	1,551	497	715	173	522	61	9,932
Infectious hepatitis(*b*)	2,526	2,362	1,819	558	147	589	66	56	8,123
Leprosy	3	1	4	2	26	..	37	..	73
Leptospirosis	12	..	100	..	1	..	..	..	113
Paratyphoid fever	2	1	..	..	1	2	..	..	6
Poliomyelitis	..	1	1	..	..	1	..	..	3
Syphilis	489	80	142	51	63	6	9	..	840
Tetanus	8	2	6	..	2	..	..	..	18
Tuberculosis(*c*)	850	535	479	110	151	51	43	14	2,233
Typhoid	13	3	9	13	2	..	38	1	79
Typhus (all forms)	1	..	6	..	..	..	..	..	7

(*a*) No cases of cholera, plague, smallpox or yellow fever were notified. (*b*) Includes hepatitis, serum (homologous). (*c*) Queensland figure includes erythema nodosum and pleural effusion.

Tuberculosis and poliomyelitis. The number of new cases of tuberculosis notified in each State and Territory by age groups for the year 1968 is shown on page 467. Some data regarding deaths from tuberculosis are shown on page 200 of Chapter 8, Vital Statistics. Cases of poliomyelitis notified in each State and Territory for the years 1964 to 1968 are shown on page 468.

Infectious hepatitis. The following table shows the number of cases of infectious hepatitis notified in each State and Territory during the years 1964 to 1968.

INFECTIOUS HEPATITIS: CASES NOTIFIED, STATES AND TERRITORIES, 1964 TO 1968

State or Territory	*1964*	*1965*	*1966*	*1967*	*1968*
New South Wales	2,731	3,325	4,188	4,032	2,526
Victoria	2,697	1,987	2,137	2,991	2,362
Queensland(*a*)	1,163	556	843	1,973	1,819
South Australia	289	414	978	1,299	558
Western Australia	101	83	28	190	147
Tasmania	636	197	200	425	589
Northern Territory	57	128	78	158	66
Australian Capital Territory	12	51	125	248	56
Australia	7,686	6,741	8,577	11,316	8,123

(*a*) Includes hepatitis, serum (homologous).

Venereal diseases. The prevention and control of venereal diseases is the responsibility of State Health Departments. The necessary powers for the purpose are provided either by a special Venereal Diseases Act or by a special section of the Health Act. Venereal diseases are notifiable in all States and

Territories. While the provisions of the legislation differ from State to State, the Acts usually make it obligatory upon the patient to report for and continue under treatment until certified as cured. Treatment of veneral disease must be by a registered medical practitioner. Facilities for treatment of venereal disease free of charge may be arranged at subsidised hospitals or at special clinics. Penalties may be imposed on a patient who fails to continue under treatment. Clauses are inserted in the Acts which aim at preventing the marriage of any infected person, or the employment of an infected person in the manufacture or distribution of foodstuffs.

Commonwealth grants to organisations associated with public health

In addition to providing the services mentioned on pages 461–74, the Commonwealth Government gives financial assistance to certain organisations concerned with public health. Examples of organisations included in this category are given in the following text. More detailed information on their operations and functions is given in Year Book 53, pages 570–3.

The Commonwealth National Fitness Council operates under the *National Health Act* 1941–1968. Its main function is to advise the Minister for Health concerning the promotion of national fitness. The Act also provides for the establishment of a trust account, known as the National Fitness Fund, to assist in financing the movement. During 1967–68 the Commonwealth's contribution to the Fund was $366,000, of which $66,000 was for assistance towards capital expenditure. Expenditure from the Fund during 1967–68 was $412,038, distributed as follows: State National Fitness Councils, $226,918, State Education Departments, $34,000; State Universities $24,800; Australian Recreation Leadership Course, $4,000; capital expenditure on national fitness projects, $38,658; grants to Australian Capital Territory organisation, $7,246; and administration, $76,416, of which $67,323 was the cost of publication of the booklet, 'Keeping Fit'.

The Royal Flying Doctor Service is a non-profit organisation providing medical services in the remote areas of Australia. It is distinct from, but co-ordinates with, the Aerial Medical Services operated by the Commonwealth Department of Health from Darwin and Alice Springs in the Northern Territory. The Royal Flying Doctor Service is financed mostly from donations and government contributions. During 1967–68 the Commonwealth Government contributed $329,371, of which $179,370 was for capital expenditure, and $150,000 towards operating costs. The Service made 2,959 flights during 1967–68 compared with 2,488 in 1966–67, travelling 1,157,994 miles (917,237 in 1966–67) and transporting 3,072 patients (2,193 in 1966–67). In the same periods medical staff conducted a total of 64,725 consultations (45,804 in 1966–67) and dental treatment was given to 6,272 patients (5,427 in 1966–67). The radio network of the Service handled 328,109 telegrams in 1967–68 compared with 322,589 the previous year.

The Red Cross Blood Transfusion Service is conducted by the Australian Red Cross Society throughout Australia. The operating costs of the service in the States are met by the State Governments paying 60 per cent; the Commonwealth, 30 per cent; and the Society, 10 per cent. In the Northern Territory and Australian Capital Territory the Commonwealth pays 90 per cent and the Society 10 per cent. Commonwealth expenditure for each State and Territory during 1967–68 was as follows: New South Wales, $168,124; Victoria, $175,671; Queensland, $119,152; South Australia, $75,958; Western Australia, $79,580; Tasmania, $13,511; Northern Territory, $4,180; and the Australian Capital Territory $19,389, making a total of $655,565 compared with $973,825 for 1966–67. The decrease was due mainly to a variation in the method of re-imbursing the States for the Commonwealth proportion of the costs.

Lady Gowrie Child Centres were established in 1940 by the Commonwealth Government in each of the six State capitals. The functions of these centres include specialised demonstration and research relating to problems of physical growth and nutrition, physical and mental development, and also to test and demonstrate methods for the care and instruction of the young child. The centres are administered by local committees under supervision of the Australian Pre-school Association and are financed mainly by Commonwealth grants. The Commonwealth contribution for 1967–68 was $120,000 for the Centres and $14,800 for the Australian Pre-school Association.

The Home Nursing Subsidy Scheme, under the *Home Nursing Subsidy Act* 1956, provides for a Commonwealth subsidy to assist the States in the expansion of home nursing activities. Organisations eligible for the subsidy are those which are non-profit making, employ registered nurses, and receive assistance from a State Government, local government body or other authority established by or under State legislation. At 30 June 1968 there were 66 home nursing services in the States employing approximately 700 trained nurses. Commonwealth assistance to the States during 1967–68 was $764,959. Home nursing services in the Northern Territory and Australian Capital Territory are provided by the Commonwealth Department of Health.

The *National Heart Foundation of Australia* is a private national organisation established to promote research in cardiovascular disease, to rehabilitate heart sufferers and to foster the dissemination of information about heart diseases. Formed in 1960, as a result of a public appeal yielding $5 million to which the Commonwealth Government contributed $20,000, the Foundation has its headquarters in Canberra. From its inception to the end of 1968 the Foundation has allocated $3 million for grants-in-aid towards research in university departments, hospitals and research institutes; research fellowships tenable in Australia and overseas; and overseas travel grants. Most of the annual expenditure of about $700,000 is devoted to supporting research into cardiovascular disease.

The *World Health Organization* (WHO) is a specialised agency of the United Nations acting as a directing and co-ordinating authority on international health work. It also provides health services and facilities to people of trust territories and other groups if requested by the United Nations. Australia was represented at the Twenty-first World Health Assembly held at Geneva in May 1968, and at the Nineteenth Western Pacific Regional Committee Meeting at Manila in September 1968. The Commonwealth contribution to WHO during 1967–68 was $721,275, which included a grant of $12,000 to the Commonwealth Serum Laboratories for WHO influenza research.

The *International Agency for Research on Cancer* was established by the World Health Organization, and participation by Australia was approved by the Government in 1965. The objectives of the Agency are to promote international collaboration in cancer research and to provide a means through which countries and interested organisations may co-operate in the stimulation and support of research into cancer. The Commonwealth contribution to the Agency in 1967–68 was $134,577.

INSTITUTIONS

Institutions referred to under this heading are classified into the following groups: (i) public hospitals and nursing homes; (ii) mental hospitals; (iii) private hospitals and nursing homes; (iv) repatriation hospitals; (v) isolation hospitals. Statistics of quarantine stations, and of hospitals maintained by the Armed Services are not included. A number of institutions, classified by the Commonwealth Department of Health as 'public' hospitals or nursing homes, are for various reasons not included in the statistics of public hospitals and nursing homes; there were 73 such institutions in 1967, with an approved bed capacity of 3,700.

Public hospitals and nursing homes

The statistics shown for public hospitals and nursing homes refer to the following institutions: *New South Wales*—all institutions which are under the authority of the New South Wales Hospitals Commission, and which receive a government subsidy during the year, and the six State hospitals and nursing homes under the control of the Department of Public Health; *Victoria*—all subsidised hospitals and subsidised hospitals for the aged under the authority of the Victorian Hospitals and Charities Commission, two tuberculosis sanatoria, and the Peter MacCallum Clinic; *Queensland*—all hospitals controlled by the State Government or by the State hospital boards, including some institutions for out-patients or first-aid treatment only and some other hospitals which provide public accommodation in the form of public wards or designated public beds; *South Australia*—all hospitals controlled or maintained by, or which receive a regular annual grant or subsidy for maintenance purposes from, the South Australian Government, and hospitals controlled and maintained by local government or semi-governmental authorities; *Western Australia*—all departmental and board hospitals, excluding the Perth Dental Hospital, one subsidised leased hospital, and the Australian Inland Mission hospitals; *Tasmania*—all public hospitals designated as such by the Director-General of Health Services, together with three homes for the aged, and two chest hospitals; *Northern Territory*—departmental hospitals at Darwin, Alice Springs, Tennant Creek, and Katherine; *Australian Capital Territory*—the Canberra Community Hospital.

PUBLIC HOSPITALS AND NURSING HOMES: NUMBER, STAFF AND ACCOMMODATION, STATES AND TERRITORIES, 1966-67

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Number of hospitals and nursing homes	269	157	144	66	97	26	4	1	764
Medical staff—									
Salaried	1,237	1,397	801	300	210	140	25	15	4,125
Other(*a*)	5,094	2,042	193	671	422	154	. .	122	8,698
Nursing staff(*b*)	18,506	13,487	6,696	3,996	4,249	1,864	253	530	49,581
Accommodation—									
Number of beds and cots	27,570	17,047	13,420	4,991	6,699	2,941	565	499	73,732

(*a*) Includes honorary and visiting medical officers who may hold appointments at more than one hospital. (*b*) Qualified and student nurses, assistant nurses, assistant nurse trainees, nursing aides, and nursing aide trainees.

In-patients treated

The following table gives particulars of in-patients treated. The figures shown refer to cases, that is to say, a person who is admitted to hospital or nursing home twice during a year is counted twice. Newborn babies are excluded unless they remain in hospital or nursing home after their mothers' discharge.

PUBLIC HOSPITALS AND NURSING HOMES: IN-PATIENTS TREATED STATES AND TERRITORIES, 1966-67

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
In-patients at beginning of year—									
Males	9,919	n.a.	3,904	1,566	2,137	956	197	151	n.a.
Females	11,464	n.a.	5,090	1,948	2,548	1,080	178	235	n.a.
Persons	21,383	13,367	8,994	3,514	4,685	2,036	375	386	54,740
Admissions and re-admissions during year—									
Males	227,377	n.a.	110,872	50,666	56,113	15,944	5,569	6,146	n.a.
Females	331,744	n.a.	140,022	63,513	67,501	23,309	6,531	9,606	n.a.
Persons	559,121	324,869	250,894	114,179	123,614	39,253	12,100	15,752	1,439,782
Total in-patients (cases) treated—									
Males	237,296	n.a.	114,776	52,232	58,250	16,900	5,766	6,297	n.a.
Females	343,208	n.a.	145,112	65,461	70,049	24,389	6,709	9,841	n.a.
Persons	580,504	338,236	259,888	117,693	128,299	41,289	12,475	16,138	1,494,522
Discharges and deaths—									
Males . .	227,791	n.a.	111,187	50,757	56,121	15,996	5,561	6,127	n.a.
Females . .	331,415	n.a.	140,153	63,552	67,516	23,343	6,496	9,572	n.a.
Persons . .	559,206	325,277	251,340	114,309	123,637	39,339	12,057	15,699	1,440,864
In-patients at end of year—									
Males	9,505	n.a.	3,589	1,475	2,129	904	205	170	n.a.
Females	11,793	n.a.	4,959	1,909	2,533	1,046	213	269	n.a.
Persons	21,298	12,959	8,548	3,384	4,662	1,950	418	439	53,658
Average daily number resident	20,465	12,786	8,442	3,363	4,534	1,946	388	409	52,333

In addition to those admitted to the hospitals and nursing homes, there are large numbers of out-patients treated. During 1966–67 there were 1,660,199 out-patients treated in New South Wales, 815,817 in Victoria, 868,098 in Queensland, 158,495 in South Australia, 203,400 (estimated) in Western Australia, 122,477 in Tasmania, 122,144 in the Northern Territory, and 25,853 in the Australian Capital Territory, making an estimated total for Australia of 3,976,500. The figures quoted refer to cases, as distinct from persons and attendances.

Revenue and expenditure

Details of the revenue and expenditure for the year 1966–67 are shown in the next table. The revenue includes Commonwealth hospital benefits payments. For some States expenditure on capital items out of individual hospitals' own funds are not included in the figures shown. Comparison between the States should therefore be made with caution.

In previous Year Books, Commonwealth hospital benefits, which were paid direct to public hospitals and nursing homes in either full or part payment of fees incurred by pensioners and other uninsured patients, were shown for some States as a separate revenue item or included under 'Government aid'. In the following table this revenue has been treated on the same basis as Commonwealth hospital benefits paid for insured patients and included in the amounts shown for fees. Details of Commonwealth expenditure on each of the different categories of hospital benefits are shown on page 464.

PUBLIC HOSPITALS AND NURSING HOMES: REVENUE AND EXPENDITURE, STATES AND TERRITORIES, 1966-67

($'000)

	N.S.W.	*Vic.(a)*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Revenue—									
Government aid	79,922	55,740	31,636	23,285	24,352	10,173	3,286	3,813	232,207
Municipal aid	..	..	..	767	4	..	..	..	771
Public subscriptions, legacies, etc.	200	4,996	298	582	60	..	..	..	6,136
Fees(*b*)	55,997	36,102	12,105	8,945	10,770	2,706	425	1,131	128,181
Other	1,617	1,992	3,990	953	404	38	..	..	8,994
Total revenue	*137,736*	*98,830*	*48,030*	*34,532*	*35,589*	*12,917*	*3,711*	*4,944*	*376,289*
Expenditure—									
Salaries and wages	82,979	59,242	26,826	15,572	19,255	7,390	1,896	2,334	215,494
Upkeep and repair of buildings and grounds	3,891	2,029	1,119	1,291	2,877	275	338	194	12,014
All other maintenance	36,259	22,490	15,810	8,143	7,990	3,358	906	979	95,935
Total maintenance	123,129	83,761	43,755	25,006	30,122	11,023	3,140	3,507	323,443
Capital	14,271	16,073	4,573	9,131	6,152	1,862	571	1,324	53,957
Total expenditure	*137,400*	*99,834*	*48,328*	*34,137*	*36,274*	*12,885*	*3,711*	*4,831*	*377,400*

(*a*) Excludes the exotic diseases block at the Fairfield hospital. (*b*) Includes Commonwealth hospital benefits paid direct to public hospitals and nursing homes.

Summary for Australia

A summary, for the years 1962–63 to 1966–67, of the number of public hospitals and nursing homes in Australia, medical and nursing staffs, beds, admissions, in-patients treated, out-patients, average daily number resident, revenue, and expenditure is given in the following table. This table has been revised to include particulars of the six State Hospitals and Homes in New South Wales and the hospitals for the aged in Victoria.

PUBLIC HOSPITALS AND NURSING HOMES: AUSTRALIA, 1962-63 TO 1966-67

		1962–63	*1963–64*	*1964–65*	*1965–66*	*1966–67*
Hospitals and nursing homes		753	755	760	765	764
Medical staff—salaried		3,292	3,430	3,674	3,967	4,125
other(*a*)		7,850	7,980	8,365	8,807	8,698
Nursing staff(*b*)		41,555	43,740	45,212	47,640	49,581
Beds and cots		67,369	69,219	70,027	71,210	73,732
Admissions		1,275,588	1,325,800	1,363,890	1,395,179	1,439,782
Total in-patient (cases) treated		1,321,982	1,374,329	1,416,198	1,447,151	1,494,522
Average daily number resident		47,250	49,041	49,726	50,152	52,333
Out-patients (cases)(*c*)		3,112,000	3,349,000	3,575,000	3,810,000	3,976,500
Revenue	$'000	257,746	281,982	310,644	341,701	376,289
Expenditure	$'000	262,686	284,751	309,897	340,960	377,400

(*a*) Includes honorary and visiting medical officers, who may hold appointments at more than one hospital. (*b*) Qualified and student nurses, assistant nurses, assistant nurse trainees, nursing aides, and nursing aide trainees. (*c*) Partly estimated.

Mental health services

The presentation of meaningful statistics of mental health services has become increasingly difficult because of changes in recent years in the institutions and services for the care of mental patients. The emphasis has shifted from institutions for care of patients certified insane to a range of mental health services provided for in-patients and out-patients at psychiatric hospitals, admission and reception centres, day hospitals, out-patient clinics, training centres, homes for the mentally retarded and geriatric patients, psychiatric units in general hospitals, and the like.

To enable valid comparisons to be made of mental health statistics in each State the mental health authorities of all States have proposed standard statistical definitions. The statistical recording systems of a number of States are currently being reviewed for this purpose. Meanwhile certain limited information is available which is shown in the following paragraphs. Since a common measure has not yet been achieved, the figures for individual States should not be added to form Australian totals.

In-patient institutions

The following table shows the number of major in-patient institutions in each State in 1967, the accommodation they provide for patients, and their staff. In-patient care for voluntary patients is also provided at many general public and a number of private hospitals. There are also psychiatric units attached to gaols, juvenile corrective centres and similar institutions. Only the following institutions are included in this table: *New South Wales*—the fourteen State psychiatric centres (a psychiatric hospital and associated admission centre being regarded as one psychiatric centre) and the two authorised private psychiatric centres (several other institutions provide in-patient care for voluntary patients only, but are excluded from the scope of the statistics); *Victoria*—the four psychiatric hospitals, ten mental hospitals, five informal hospitals, and ten intellectual deficiency training centres and schools; *Queensland*—four mental hospitals and one epileptic home; *South Australia*—four mental hospitals; *Western Australia*—the four mental hospitals and one psychiatric hospital; and *Tasmania*—the Lachlan Park-Royal Derwent hospital complex.

MENTAL HEALTH: IN-PATIENT INSTITUTIONS, ACCOMMODATION AND STAFF STATES AT 30 JUNE 1967

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*
In-patient institutions . . .	16	(*a*)29	5	4	5	1
Beds and cots for patients . .	12,008	(*b*)9,434	4,230	2,313	1,683	950
Staff—Medical	232	(*a*)145	(*d*)32	27	15	9
Nursing	(*c*)3,362	(*c*)2,903	(*d*)1,208	718	499	292

(*a*) At 31 December 1967. (*b*) The number of beds and cots occupied on 31 October 1967. (*c*) Includes attendants. (*d*) Full-time staff only.

There are no separate in-patient institutions for mental patients in the Northern Territory or the Australian Capital Territory. With the appointment of a Director of Psychiatric Services the organisation of a psychiatric service was begun in the Australian Capital Territory in 1967–68. The emphasis of this service is being placed on the prevention, treatment and after-care of mental illness on a community basis.

Patients

The following table sets out statistics of in-patients under the care of the respective State mental health services.

IN-PATIENTS UNDER THE CARE OF STATE MENTAL HEALTH SERVICES, 1966-67

	N.S.W.	*Vic.*(*a*)(*b*)	*Qld*	*S.A.*	*W.A.*	*Tas.*
In-patients at beginning of year—						
Males	6,608	5,502	2,384	1,459	1,240	436
Females	5,957	5,262	1,594	1,187	858	469
Persons	12,565	10,764	3,978	2,646	2,098	905
Admissions and re-admissions during year—						
Males	8,214	6,100	978	1,487	1,267	600
Females	8,084	6,305	703	1,379	1,055	550
Persons	16,298	12,405	1,681	2,866	2,322	1,150
Total in-patients (cases) treated—						
Males	14,822	11,602	3,362	2,946	2,507	1,036
Females	14,041	11,567	2,297	2,566	1,913	1,019
Persons	28,863	23,169	5,659	5,512	4,420	2,055
Discharges, including deaths—						
Males	8,367	6,149	975	1,585	1,230	576
Females	8,503	6,523	774	1,430	1,012	558
Persons	16,870	12,672	1,749	3,015	2,242	1,134
In-patients at end of year—						
Males	6,455	5,453	2,387	1,361	1,277	460
Females	5,538	5,044	1,523	1,136	901	461
Persons	11,993	10,497	3,910	2,497	2,178	921

(*a*) Year ended 31 December 1967. (*b*) Includes transfers from one institution to another.

State government expenditure on mental health services

The following figures show particulars of expenditure by States for the year 1966–67. Maintenance expenditure represents expenditure on wages and salaries, upkeep and repair of buildings and grounds, and other maintenance. The figure for New South Wales relates to the 14 State psychiatric centres and the Master in Protective Jurisdiction of the Supreme Court. Capital expenditure is expenditure under the *State Grants (Mental Health Institutions) Act* 1964–1967 only. For details of Commonwealth financial assistance to the States for mental health services, *see* pages 464–5.

MENTAL HEALTH: EXPENDITURE, STATES, 1966-67
($'000)

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*
Maintenance . .	22,827	20,739	6,494	4,620	3,472	1,902
Capital . . .	6,652	3,577	863	578	781	2,469

Private hospitals and nursing homes

In addition to the other hospitals and nursing homes referred to in previous sections, there are private hospitals and nursing homes in each State. The figures shown in the following table refer to those private hospitals and nursing homes which have been approved for the payment of hospital benefits under the Commonwealth *National Health Act* 1953–1968. A small number of institutions classified as 'private' by the Commonwealth Health Department are included in public hospital statistics, and these have been omitted from the following two tables. Statistical information about patients, staff and finance of these institutions is not available on a uniform Australia-wide basis.

PRIVATE HOSPITALS AND NURSING HOMES: STATES, 1963 TO 1967

	30 June—				
State	*1963*	*1964*	*1965*	*1966*	*1967*
NUMBER OF PRIVATE HOSPITALS AND NURSING HOMES					
New South Wales	507	527	531	527	535
Victoria	272	288	306	309	313
Queensland	130	136	146	149	152
South Australia	170	162	176	177	184
Western Australia	85	85	91	95	96
Tasmania	39	41	42	45	42
Australia	**1,203**	**1,239**	**1,292**	**1,302**	**1,322**
NUMBER OF BEDS FOR PATIENTS					
New South Wales	11,482	12,647	13,626	14,503	15,825
Victoria	5,896	6,371	6,797	7,117	7,295
Queensland	3,350	3,818	4,362	4,416	4,630
South Australia	3,609	3,837	4,081	4,166	4,361
Western Australia	2,549	2,627	2,846	2,898	3,029
Tasmania	870	925	982	1,033	1,038
Australia	**27,756**	**30,225**	**32,694**	**34,133**	**36,178**

There were no institutions of this nature in the Australian Capital Territory or the Northern Territory during 1966–67.

Repatriation hospitals

The medical care of eligible ex-servicemen and dependants of deceased ex-servicemen is a major function of the Commonwealth Repatriation Department, which provides a comprehensive service.

In-patient treatment is provided at Repatriation General Hospitals in each capital city, at six auxillary hospitals and at one sanatorium. In-patient treatment may also be provided in country hospitals at the Department's expense in certain circumstances. Mental patients requiring custodial care are, by agreement with the State Governments, accommodated at the expense of the Department in mental hospitals administered by the State authorities.

Details of patients, staff and expenditure on Repatriation institutions and other medical services are given in Chapter 5 Repatriation.

Hansenide hospitals

There are four isolation hospitals in Australia for the care and treatment of persons suffering from Hansen's disease (leprosy). The numbers of isolation patients at these hospitals on 31 December 1968 were: Little Bay (New South Wales), 9; Fantome Island (North Queensland), 12; Derby (Western Australia), 181; and East Arm Settlement (Northern Territory), 11. In addition, there were 102 voluntary patients resident in the East Arm Settlement, mostly for the purpose of reconstructive surgery. With the exception of the Institute of Tropical Medicine at Little Bay, nursing services are provided mostly by sisters of religious orders under supervision of Government medical officers.

Special wards for the isolation and treatment of leprosy patients are also provided at other centres. The location of these wards and the numbers of isolation patients resident at 31 December 1968, were: Fairfield (Victoria), 3; Princess Alexandria Hospital (Queensland), 7; and Royal Adelaide Hospital (South Australia), 1.

Of the total 224 cases in isolation, 203 were Aborigines.

CHAPTER 15

EDUCATION, CULTURAL ACTIVITIES, AND RESEARCH

For the most recent statistics available on subjects dealt with in this chapter reference should be made to the series of mimeographed bulletins *Social Statistics* issued by this Bureau. The *Quarterly Summary of Australian Statistics* contains summarised information on these subjects, and financial aspects are dealt with in the annual bulletins *Commonwealth Finance* and *State, Territory and Local Government Authorities' Finance and Government Securities*. The Annual Reports of the respective State education departments provide detailed statistical and other information concerning particular States.

EDUCATION

An account of the development of the Australian school system up to 1929 may be found in Year Books Nos 1, 2, 17 and 22. In Year Book No. 40 a review of changes which occurred up to 1951 and of the practices then current was presented from material furnished by the then Commonwealth Office of Education (now part of the Commonwealth Department of Education and Science). The Department has contributed much of the textual matter in the early part of this chapter.

Education in Australian schools

Administration and organisation

In Australia the provision of schools is mainly the responsibility of State governments. During the nineteenth century all six Australian colonies had established systems of compulsory education, beginning with the *Education Act* 1872 in Victoria, and followed by similar Acts in Queensland (1875), South Australia (1875), New South Wales (1880), Tasmania (1893), and Western Australia (1893). These Acts, with subsequent amendments, constitute the legal basis of compulsory education in the Australian States to-day.

School attendance is compulsory throughout Australia between the ages of six and fifteen at least. The minimum leaving age is fifteen years in New South Wales, Victoria, Queensland, and South Australia, and sixteen years in Tasmania, while in Western Australia attendance is compulsory until the end of the year in which the child turns fifteen years. The Education Acts require that all children between the prescribed ages must attend either a government school or some other recognised educational institution. Children may be exempted from the requirement of compulsory attendance if they live too far from a school or suffer a physical disability. These children usually receive correspondence tuition.

The school year in Australia begins at the end of January or early in February; it ends in mid-December. The long vacation is taken over the summer months (December to February) and two short vacations divide the school year into three terms.

At government primary schools it is usual for both boys and girls to attend the same school; at the secondary level practices vary, but the trend is towards co-educational schools. Non-government secondary schools cater mainly for boys and girls separately.

Government school systems

Government schools, except in the Commonwealth Territories, are a responsibility of the six State governments. Although the educational systems are not identical, they have many similar features. Responsibility for framing educational policy and having it put into effect rests with a Minister for Education, who is a member of the State Cabinet. The administrative authority in each State is an education department headed by a Director-General of Education. Separate divisions of the education department in each State administer primary, secondary and technical education (in New South Wales there is a separate Department of Technical Education). Other divisions look after such matters as the recruitment and training of teachers, pupil guidance, research, and the education of atypical children. In New South Wales and Queensland, administration has been decentralised to a degree by the appointment of directors who are responsible for policy in the area which they control.

Tuition at government primary and secondary schools is free in all States. Parents are usually expected to bear the cost of text-books, uniforms and charges for such things as the use of sports materials. However, income tax concessions exist in respect of these expenditures for both government and non-government systems, and certain text-book costs are subsidised in the case of pupils attending government and non-government schools in some States.

Non-government schools systems

Approximately one quarter of Australian school children are enrolled at non-government primary and secondary schools and about 80 per cent of these attend Roman Catholic schools. At the primary level these children normally attend co-educational parish schools, but at the secondary level there are separate boys and girls schools. Some of the small convent schools in country districts are co-educational up to the junior secondary level.

The majority of other non-government schools, sometimes known as 'private' or 'independent' schools, are conducted by, or are under the auspices of, various other religious denominations, particularly the Church of England, Presbyterian and Methodist Churches. A few non-government schools are undenominational and are conducted under the auspices of corporate bodies.

The methods adopted by the educational authorities to ensure an acceptable standard of education at non-government schools vary from State to State. In New South Wales, Victoria, South Australia and Tasmania, these schools are regularly inspected. In Victoria and Tasmania, schools and teachers must be registered. Non-government schools in Queensland and also those in Western Australia are inspected on request.

Principally because of the public examination system, courses and curricula in non-government schools are very similar to those in the government schools. The principals of a number of the larger non-government schools have formed organisations with both State and Australia-wide coverage, namely the Headmasters Conference of the Independent Schools of Australia and the Association of Headmistresses of the Independent Schools of Australia.

Schools and courses

Primary education in government schools. Though school attendance is not compulsory until the age of six, most Australian children begin school when they are five, attending infants schools or infants classes attached to a primary school. In some States the first year in the infants department is known as 'kindergarten'. The emphasis in infants classes is on the development of skills in language and numbers. Creative expression through drawing, dancing, handiwork, dramatisation, and painting and similar activities is encouraged.

Primary schools are normally provided when and where there is sufficient population to justify them. Irrespective of the size or the location of the school, standards of tuition are similar because teachers within a State follow similar courses of training and transfer freely between metropolitan and country areas. The education departments prescribe syllabuses of instruction, which are drawn up with the assistance of expert committees. The primary syllabuses have an emphasis on basic subjects like reading, writing, arithmetic and social studies, but the teacher has some freedom to modify courses to suit local circumstances and the varying abilities of his students.

Children attend primary schools in their own districts, usually within walking distance of their homes, on five days each week. The school day is broken up into three or four sessions by a lunch break and by a morning and sometimes an afternoon recess. The total period of instruction is four and a half to five hours daily with individual subject lessons lasting twenty to thirty minutes. Periods are set aside for physical education and sport. One teacher generally has charge of a class and teaches it all the subjects set out in the curriculum for the particular grade.

Progression from primary to secondary school is usually automatic. Allocation to particular schools or particular courses is based on the district in which the child lives, the recommendations of the headmaster, general ability tests, tests of achievement in the basic subjects, and parents' wishes.

Secondary education in government schools. The age of transfer from a government primary to secondary school is usually between twelve and thirteen. Most secondary schools are co-educational, although separate schools for boys and girls are not uncommon in capital cities. In the cities and larger country centres secondary and primary courses are provided in separate schools, but in less populous areas secondary classes sometimes share buildings with primary classes.

The secondary student takes up new studies, such as foreign languages, technical or commercial subjects, and moves on to more specialised studies in natural and social sciences and mathematics. The study of basic subjects begun in primary school is continued. The actual subjects studied depend on the ability of the pupil and, in some States, the type of school. A school day is divided into 'periods' and the children are taught by a number of teachers, each specialising in a particular subject or group of subjects.

In the past, various kinds of secondary schools were established in which different types of education were provided to meet the varying abilities and needs of students, although in country areas secondary schools tended of necessity to be comprehensive and offered a full range of secondary courses. But following the re-examination by expert committees of the problems associated with the provision of appropriate secondary education for all, significant changes in the structure and curricula of secondary schools are taking place. In New South Wales, for example, following a committee's recommendation that the secondary curriculum should offer a core of common basic education to all students, secondary schools have become 'comprehensive'. Pupils of different aptitudes and interests in a given locality now attend the same secondary school, undertake this core of common basic studies, and in addition specialise according to their proven abilities and interests.

The most common type of secondary school is the comprehensive or multi-purpose high school, which offers a wide range of subjects. To cater for this diversity of subjects, most high schools now have modern facilities for the teaching of domestic science, commercial subjects, woodwork, and other technical subjects. In some States there are still, however, separate high schools specialising in technical, agricultural, commercial, or home science subjects. Some of the agricultural high schools are residential. The curriculum consists of general educational subjects and practical farm training. There are also 'area' and 'rural' schools offering up to three years of secondary study, and in some States courses in agriculture are also given at high schools.

Primary and secondary education in non-government schools. Non-government schools follow curricula similar to those laid down by education departments and prepare their students for examinations conducted by public examining authorities. Most non-government schools are comprehensive type schools, providing a range of subjects and courses at various levels. Although there are similarities between non-government and government schools in the courses they provide, more emphasis may be given to the religious training of pupils in denominational schools. Non-government schools sometimes offer facilities additional to those normally found in government schools, such as personal tuition in music. A few are organised on 'experimental' lines.

Examinations

During the course of secondary education State-wide examinations are taken at two levels. The earlier examination qualifies pupils for entry to trade courses at technical colleges and agricultural colleges, to junior commercial positions in, for instance, insurance and banking, to nursing and secretarial courses, to lower grades of the public service, and to industry. The examination at the end of the secondary school course qualifies students for entry to teachers colleges, colleges of advanced education, and is also the qualification for entry to the university, certain subjects and combinations of subjects being set down as the matriculation requirements by the respective universities.

In most States the higher examination is controlled by a board consisting of representatives of the department of education, the universities, non-government schools, and sometimes of other bodies such as teachers organisations. A brief description of the examinations in each State follows.

New South Wales. The full secondary course is of six years' duration, with a School Certificate Examination at the end of the fourth year, age about sixteen, and a Higher School Certificate Examination (Matriculation) after a further two years. Pupils who leave school before gaining their School Certificate receive a signed statement of attainment from their school principal.

Victoria. The Leaving Examination is taken at the end of fifth year, and the Matriculation Examination at the end of sixth year. Pupils at approved non-government schools and certain government schools may be accredited for the Leaving by passing examinations set by their own schools.

Queensland. The Junior Public Examination is taken at the end of third year, at about the age of fifteen and a half. The Senior Public Examination conducted by the University of Queensland is taken at the end of fifth year, at about the age of seventeen and a half, and matriculation is obtained on results in this examination.

South Australia. The Intermediate Examination taken at the end of the third year, at about the age of fifteen and a half, was held for the last time in 1968 and has not been replaced by any other public examination. The Leaving Examination is taken at the end of the fourth year and a Matriculation Examination is held at the end of the fifth year.

Western Australia. The Junior Certificate Examination is taken at the end of third year, at about the age of fifteen and a half. Students who pursue a less academic course may take the High School Certificate Examination at this level. The Leaving Certificate Examination is taken at the end of fifth year, at an average age of seventeen and a half, and matriculation is gained on results in this examination.

Tasmania. An internal examination, the School Certificate, is taken at the end of fourth year, at about the age of sixteen, and the Higher School Certificate (Matriculation) conducted by the Schools Board is taken at the end of the fifth or sixth year. Matriculation requirements are determined by the University of Tasmania.

Numbers of schools, teachers and pupils

The statistics which follow relate generally to schools providing education according to the primary or secondary school curricula of the various State education departments, or both, whether provided in government or non-government schools. Junior technical schools, correspondence schools, and schools in institutional homes, hospitals and similar establishments are included. Institutions providing only pre-school education, senior technical and agricultural colleges, evening schools, continuation classes, and institutions such as business colleges and coaching establishments are, as a rule, excluded.

School censuses are conducted annually at or about the beginning of August throughout all States and Territories of Australia. The numbers of pupils in the tables which follow refer to enrolments at the school census date. The numbers of schools and teachers refer to the position at dates which vary from State to State and in some instances from year to year. While it has not been possible to present all figures on a uniform basis between States, continuity of the figures for any one State over the period of years shown has been maintained as far as possible.

Schools, teachers and pupils

The numbers of government and non-government schools, teachers and pupils in 1968 and earlier years are shown in the following tables.

NUMBERS OF SCHOOLS AND PUPILS, BY CATEGORY OF SCHOOL
STATES AND TERRITORIES, 1968

Category of school	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas*	*N.T.*	*A.C.T.*	*Aust.*
				SCHOOLS					
Government	2,552	2,247	1,264	663	570	291	68	39	7,694
Non-government—									
Denominational—									
Church of England . .	34	35	17	11	9	4	..	3	113
Hebrew	3	6	..	..	1	..	..	..	10
Lutheran	3	8	4	14	..	..	1	..	30
Methodist	6	4	(a) 5	4	3	1	2	..	25
Presbyterian	13	14	5	2	2	2	..	..	38
Roman Catholic . .	654	483	293	129	171	50	10	17	1,807
Seventh-day Adventist .	19	9	8	5	7	4	..	..	52
Other	..	4	1	2	2	4	2	..	15
Undenominational . .	57	16	9	4	4	3	3	..	96
Total, non-government .	*789*	*579*	*342*	*171*	*199*	*68*	*18*	*20*	*2,186*
Grand total	**3,341**	**2,826**	**1,606**	**834**	**769**	**359**	**86**	**59**	**9,880**

(*a*) Presbyterian and Methodist Schools Association.

NUMBERS OF SCHOOLS AND PUPILS, BY CATEGORY OF SCHOOL STATES AND TERRITORIES, 1968—*continued*

Category of school	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
PUPILS (CENSUS ENROLMENT)									
Government	725,773	555,838	285,428	222,019	161,416	76,109	10,338	20,586	2,057,507
Non-government—									
Denominational—									
Church of England	13,373	16,328	5,550	4,211	3,930	1,889	..	1,460	46,741
Hebrew	436	2,642	..	..	150	..	..	..	3,228
Lutheran	254	746	953	1,545	..	..	153	..	3,651
Methodist	3,125	4,206	(*a*)2,157	2,160	1,751	317	496	..	14,212
Presbyterian	5,692	8,515	989	1,492	1,308	638	..	..	18,634
Roman Catholic	190,472	149,286	73,847	25,462	32,471	10,600	1,783	6,897	490,818
Seventh-day Adventist	1,286	628	447	165	579	144	..	..	3,249
Other	..	2,467	171	413	176	1,201	180	..	4,608
Undenominational	6,480	3,755	4,093	1,177	203	185	58	..	15,951
Total, non-government	*221,118*	*188,573*	*88,207*	*36,625*	*40,568*	*14,974*	*2,670*	*8,357*	*601,092*
Grand total	**946,891**	**744,411**	**373,635**	**258,644**	**201,984**	**91,083**	**13,008**	**28,943**	**2,658,599**

(*a*) Presbyterian and Methodist Schools Association.

NUMBERS OF TEACHERS: STATES AND TERRITORIES, 1968(*a*)

	Government schools			*Non-government schools*			*All schools*		
		Part-time			*Part-time*			*Part-time*	
State or Territory	*Full-time*	*No.*	*Eq. f.t.u. (b)*	*Full-time*	*No.*	*Eq. f.t.u. (b)*	*Full-time*	*No.*	*Eq. f.t.u. (b)*
New South Wales	30,907	1,392	687	7,630	(*c*)1,918	589	38,537	3,310	1,276
Victoria	23,562	(*d*)2,541	(*d*)1,523	6,363	1,534	331	29,925	4,075	1,854
Queensland	10,808	593	47	2,820	666	149	13,628	1,259	196
South Australia	9,021	547	195	1,319	396	138	10,340	943	333
Western Australia	6,020	189	74	1,402	281	74	7,422	470	148
Tasmania	3,383	284	71	559	194	65	3,942	478	136
Northern Territory	470	3	1	(*e*)78	(*e*)3	(*e*)1	548	6	2
Australian Capital Territory	846	34	14	303	(*c*)64	24	1,149	98	38
Total	**85,017**	**5,583**	**2,612**	**20,474**	**5,056**	**1,371**	**105,491**	**10,639**	**3,983**

(*a*) Excludes teachers-in-training generally. (*b*) The methods used for calculating *equivalent full-time units* of part-time teaching vary from State to State, between government and non-government schools, and between primary and secondary schools within States. For most schools the information is based on either the total hours worked or total number of class periods taken in a week by part-time teachers, in relation to the normal hours worked or periods taken by full-time teachers. (*c*) Visiting teachers who attend more than one school are counted as part-time in each. (*d*) If a full-time teacher teaches both senior and junior technical school pupils, he is counted as part-time in these statistics (which include junior technical, but not senior technical schools), if his teaching load in the junior school is less than 75 per cent. (*e*) Excludes unqualified teachers and teaching assistants at mission schools.

NUMBERS OF SCHOOLS AND PUPILS: AUSTRALIA, 1964 TO 1968

	1964	*1965*	*1966*	*1967*	*1968*
Schools—					
Government	7,872	7,844	7,826	7,757	7,694
Non-government	2,205	2,221	2,194	2,187	2,186
Total schools	*10,077*	*10,065*	*10,020*	*9,944*	*9,880*
Pupils(*a*)—					
Government	1,801,364	1,857,120	1,921,263	1,993,572	2,057,507
Non-government	565,415	580,532	583,067	594,767	601,092
Total pupils	*2,366,779*	*2,437,652*	*2,504,330*	*2,588,339*	*2,658,599*

(*a*) Census enrolment.

NUMBERS OF TEACHERS, BY CATEGORY OF SCHOOL STATES AND TERRITORIES, 1968(*a*)

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Government schools—									
Full-time	30,907	23,562	10,808	9,021	6,020	3,383	470	846	85,017
Part-time—									
Number	1,392	(*b*)2,541	593	547	189	284	3	34	5,583
Eq. f.t.u.(*c*)	687	(*b*)1,523	47	195	74	71	1	14	2,612
Non-government schools—									
Baptist—									
Full-time	..	137	..	(*d*)23	..	2	..	..	162
Part-time—									
Number	..	44	..	(*d*)3	..	..	..	..	47
Eq. f.t.u.(*c*)	..	10	..	..	..	..	..	..	10
Church of England—									
Full-time	818	965	285	219	228	109	..	71	2,695
Part-time—									
Number	224	223	47	69	41	38	..	21	663
Eq. f.t.u.(*c*)	90	75	20	25	14	13	..	10	247
Hebrew—									
Full-time	30	174	..	..	6	..	..	..	210
Part-time—									
Number	5	39	..	..	3	..	..	..	47
Eq. f.t.u.(*c*)	3	10	..	..	2	..	..	..	15
Lutheran—									
Full-time	17	35	45	67	..	..	6	..	170
Part-time—									
Number	4	5	10	19	..	..	..	..	38
Eq. f.t.u.(*c*)	1	1	4	5	..	..	..	..	11
Methodist—									
Full-time	169	229	(*e*)101	103	99	19	16	..	736
Part-time—									
Number	43	74	(*e*)22	30	29	9	..	..	207
Eq. f.t.u.(*c*)	24	11	(*e*)8	12	8	3	..	..	66
Presbyterian—									
Full-time	333	514	53	75	79	32	..	..	1,086
Part-time—									
Number	61	134	12	25	13	31	..	..	276
Eq. f.t.u.(*c*)	28	26	4	12	2	13	..	..	85
Roman Catholic—									
Full-time	5,703	4,031	2,123	761	945	311	45	232	14,151
Part-time—									
Number	1,454	919	542	219	179	104	3	43	3,463
Eq. f.t.u.(*c*)	408	177	106	71	43	31	1	14	851
Seventh-day Adventist—									
Full-time	65	35	19	11	30	10	..	..	170
Part-time—									
Number	24	9	6	1	11	1	..	..	52
Eq. f.t.u.(*c*)	5	2	..	..	3	..	..	..	10
Other denominational—									
Full-time	..	13	6	..	7	69	8	..	103
Part-time—									
Number	..	7	..	..	..	7	..	..	14
Eq. f.t.u.(*c*)	..	2	..	..	..	2	..	..	4
Undenominational—									
Full-time	495	230	188	60	8	7	3	..	991
Part-time—									
Numder	103	80	27	30	5	4	..	..	249
Eq. f.t.u.(*c*)	30	17	7	13	2	3	..	..	72
Total, non-government schools—									
Full-time	*7,630*	*6,363*	*2,820*	*1,319*	*1,402*	*559*	*(f)78*	*303*	*20,474*
Part-time—									
Number	*(g)1,918*	*1,534*	*666*	*396*	*281*	*194*	*(f)3*	*(g)64*	*5,056*
Eq. f.t.u.(c)	*589*	*331*	*149*	*138*	*74*	*65*	*(f)1*	*24*	*1,371*
Grand total—									
Full-time	38,537	29,925	13,628	10,340	7,422	3,942	548	1,149	105,491
Part-time—									
Number	3,310	4,075	1,259	943	470	478	6	98	10,639
Eq. f.t.u.(*c*)	1,276	1,854	196	333	148	136	2	38	3,983

(*a*) Excludes teachers-in-training generally. (*b*) If a full-time teacher teaches both senior and junior technical school pupils, he is counted as part-time in these statistics (which include junior technical, but not senior technical, schools), if his teaching load in the junior school is less than 75 per cent. (*c*) For basis of calculating *equivalent full-time units* of part-time teaching *see* footnote (*b*) on page 487. (*d*) Baptist and Congregational. (*e*) Schools conducted by the Presbyterian and Methodist Schools Association. (*f*) Excludes unqualified teachers and teaching assistants at mission schools. (*g*) Visiting teachers who attend more than one school are counted as part-time in each.

NUMBERS OF TEACHERS: GOVERNMENT AND NON-GOVERNMENT SCHOOLS(*a*) STATES AND TERRITORIES, 1964 TO 1968

	Government schools			*Non-government schools*			*All schools*		
	Number of full-time teachers	*Part-time teachers*		*Number of full-time teachers*	*Part-time teachers*		*Number of full-time teachers*	*Part-time teachers*	
		Number	*Eq.f.t.u. (b)*		*Number*	*Eq.f.t.u. (b)*		*Number*	*Eq.f.t.u. (b)*
New South Wales—									
1964 . .		(*c*)25,993		6,541	(*d*) 1,621	n.a.	n.a.	n.a.	n.a.
1965 . .	26,846	878	415	6,842	(*d*) 1,743	443	33,688	2,621	858
1966 . .	27,898	1,056	520	6,717	(*d*) 1,821	471	34,615	2,877	991
1967 . .	29,288	1,178	582	7,179	(*d*) 1,976	530	36,467	3,154	1,112
1968 . .	30,907	1,392	687	7,630	(*d*) 1,918	589	38,537	3,310	1,276
Victoria—									
1964 . .	19,026	(*e*) 1,568	n.a.	5,326	1,004	n.a.	24,352	2,572	n.a.
1965 . .	20,083	(*e*) 1,816	1,134	5,551	1,149	278	25,634	2,965	1,412
1966 . .	20,788	(*e*) 2,275	1,357	5,854	1,237	313	26,642	3,512	1,670
1967 . .	22,144	(*e*) 2,229	1,272	6,050	1,388	292	28,194	3,617	1,564
1968 . .	23,562	(*e*) 2,541	1,523	6,363	1,534	331	29,925	4,075	1,854
Queensland—									
1964 . .	9,058	819	n.a.	2,472	539	n.a.	11,530	1,358	n.a.
1965 . .	9,316	696	56	2,543	492	107	11,859	1,188	163
1966 . .	9,637	677	54	2,649	568	131	12,286	1,245	185
1967 . .	10,107	630	51	2,701	607	134	12,808	1,237	185
1968 . .	10,808	593	47	2,820	666	149	13,628	1,259	196
South Australia—									
1964 . .	7,340	477	n.a.	1,231	329	n.a.	8,571	806	n.a.
1965 . .	7,872	468	143	1,252	355	114	9,124	823	257
1966 . .	8,189	481	174	1,306	371	116	9,495	852	290
1967 . .	8,669	650	235	1,315	396	136	9,984	1,046	371
1968 . .	9,021	547	195	1,319	396	138	10,340	943	333
Western Australia—									
1964 . .	4,818	103	16	1,194	141	32	6,012	244	48
1965 . .	5,009	119	39	1,255	186	46	6,264	305	85
1966 . .	5,298	135	39	1,278	221	67	6,576	356	106
1967 . .	5,619	174	63	1,347	243	64	6,966	417	127
1968 . .	6,020	189	74	1,402	281	74	7,422	470	148
Tasmania—									
1964 . .	3,016	141	n.a.	503	132	n.a.	3,519	273	n.a.
1965 . .	3,131	194	55	509	157	29	3,640	351	84
1966 . .	3,183	279	69	523	164	35	3,706	443	104
1967 . .	3,305	316	71	542	155	40	3,847	471	111
1968 . .	3,383	284	71	559	194	65	3,942	478	136
Northern Territory—									
1964 . .	241	6	n.a.	(*f*) 63	..	n.a.	304	6	n.a.
1965 . .	281	4	1	(*f*) 72	1	..	353	5	1
1966 . .	340	13	2	(*f*) 75	..	..	415	13	2
1967 . .	379	6	1	(*f*) 72	(*f*) 1	..	451	7	1
1968 . .	470	3	1	(*f*) 78	(*f*) 3	1	548	6	2
Australian Capital Territory—									
1964 . .		(*c*) 554		215	(*d*) 27	n.a.	n.a.	n.a.	n.a.
1965 . .	596	34	24	240	(*d*) 28	6	836	62	30
1966 . .	695	16	9	261	(*d*) 41	13	956	57	22
1967 . .	745	32	15	269	(*d*) 63	29	1,014	95	44
1968 . .	846	34	14	303	(*d*) 64	24	1,149	98	38
Australia—									
1964 . .	n.a.	n.a.	n.a.	17,545	3,793	n.a.	n.a.	n.a.	n.a.
1965 . .	73,134	4,209	1,867	18,264	4,111	1,023	91,398	8,320	2,890
1966 . .	76,028	4,932	2,224	18,663	4,423	1,146	94,691	9,355	3,370
1967 . .	80,256	5,215	2,290	19,475	4,829	1,225	99,731	10,044	3,515
1968 . .	85,017	5,583	2,612	20,474	5,056	1,371	105,491	10,639	3,983

(*a*) Excludes teachers-in-training generally. (*b*) For basis of calculating ***equivalent full-time units*** for part-time teachers *see* footnote (*b*) on page 487. (*c*) Includes numbers of full-time teachers (including casual teachers) and part-time casual teachers expressed in equivalent full-time units. (*d*) Visiting teachers who attend more than one school are counted as part-time in each school visited. (*e*) If a full-time teacher teaches both senior and junior technical school pupils, he is counted as part-time in these statistics (which include junior technical, but not senior technical, schools) if his teaching load in the junior school is less than 75 per cent. (*f*) Excludes unqualified teachers and teaching assistants at mission schools.

Ages of pupils

The ages of pupils at school census dates for 1968 and earlier years are shown in the following tables.

GOVERNMENT AND NON-GOVERNMENT SCHOOLS: PUPILS, BY AGE AND SEX AUSTRALIA, 1968
(Census enrolment)

Age last birthday (years)	*Government schools*			*Non-government schools*			*Total*		
	Boys	*Girls*	*Total*	*Boys*	*Girls*	*Total*	*Boys*	*Girls*	*Total*
Under 6	84,332	79,471	163,803	20,940	21,186	42,126	105,272	100,657	205,929
6	100,565	94,712	195,277	25,487	25,587	51,074	126,052	120,299	246,351
7	100,834	94,192	195,026	26,282	26,395	52,677	127,116	120,587	247,703
8	97,878	91,475	189,353	25,780	26,496	52,276	123,658	117,971	241 629
9	96,818	91,095	187,913	25,437	26,025	51,462	122,255	117,120	239,375
10	94,990	89,235	184,225	25,523	26,032	51,555	120,513	115.267	235,780
11	93,153	86,659	179,812	25,447	26,039	51,486	118,600	112,698	231,298
12	92,126	83,193	175,319	25,097	26,789	51,886	117,223	109,982	227,205
13	89,206	81,724	170,930	24,494	26.872	51,366	113,700	108,596	222,296
14	87,107	78,568	165,675	22,866	25,673	48,539	109,973	104,241	214,214
15	69,141	59,459	128,600	20,674	22,827	43,501	89,815	82,286	172,101
16	42,616	31,715	74,331	15,587	14,317	29,904	58,203	46,032	104,235
17	21,478	14,005	35,483	10,049	7,721	17,770	31,527	21,726	53,253
18 and over	8,157	3,603	11,760	3,859	1,611	5,470	12,016	5,214	17,230
Total	**1,078,401**	**979,106**	**2,057,507**	**297,522**	**303,570**	**601,092**	**1,375,923**	**1,282,676**	**2,658,599**

SCHOOLS: PUPILS, BY AGE, STATES AND TERRITORIES, 1968
(Census enrolment)

Age last birthday (years)	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Under 6	84,430	62,214	20,513	19,230	8,188	7,262	1,197	2,895	205,929
6	87,863	67,373	36,164	22,682	19,501	8,511	1,492	2,765	246,351
7	87,167	67,472	36,471	23,756	19,894	8,702	1,489	2,752	247,703
8	84,189	65,596	36,166	23,366	19,683	8,669	1,343	2,617	241,629
9	83,150	65,807	35,539	23,339	19,245	8,383	1,310	2,602	239,375
10	82,994	64,284	34,831	22,637	19,243	8,134	1,252	2,405	235,780
11	80,732	63,756	34,141	22,434	18,895	7,932	1,133	2,275	231,298
12	78,816	62,149	33,627	22,050	19,183	8,136	1,029	2,215	227,205
13	77,027	60,846	33,270	21,694	18,629	7,675	1,003	2,152	222,296
14	75,155	58,703	31,675	21,258	17,283	7,322	816	2,002	214,214
15	60,358	49,900	22,741	18,267	12,549	5,955	575	1,756	172,101
16	36,596	33,796	11,617	11,682	6,054	2,873	263	1,354	104,235
17	20,894	17,181	5,371	4,882	2,865	1,166	74	820	53,253
18 and over	7,520	5,334	1,509	1,367	772	363	32	333	17,230
Total	**946,891**	**744,411**	**373,635**	**258,644**	**201,984**	**91,083**	**13,008**	**28,943**	**2,658,599**

SCHOOLS: PUPILS, BY AGE AND SEX, AUSTRALIA, 1964 TO 1968
(Census enrolment)

Age last birthday (years)	*1964*		*1965*		*1966*		*1967*		*1968*	
	Boys	*Girls*	*Boys*	*Girls*	*Boys*	*Girls*	*Boys*	*Girls*	*Boys*	*Girls*
Under 6	97,651	93,404	100,399	95,811	104,222	99,495	105,396	101,154	105,272	100,657
6	114,888	109,812	118,565	113,600	120,709	114,770	125,527	118,844	126,052	120,299
7	113,685	108,423	116,512	111,748	120,392	115,466	122,494	116,952	127,116	120,587
8	111,882	106,358	114,660	109,538	117,903	112,841	121,575	116,202	123,658	117,971
9	109,601	105,826	113,810	107,719	115,761	110,778	119,065	113,949	122,255	117,120
10	108,446	103,905	111,359	107,105	115,380	108,806	117,468	112,051	120,513	115,267
11	109,593	105,228	110,026	104,874	112,832	107,872	116,618	109,812	118,600	112,698
12	107,342	102,220	110,091	105,816	110,945	105,536	113,615	108,466	117,223	109 982
13	105,434	100,668	107,850	102,728	111,659	106,397	110,724	106,305	113,700	108,596
14	99,617	94,053	101,907	97,432	105,962	100,241	109,505	104,414	109,973	104,241
15	71,619	61,317	77,735	68,958	80,972	72,015	85,254	75,619	89,815	82,286
16	43,843	33,045	46,095	35,604	49,666	38,554	52,957	41,179	58,203	46,032
17	22,826	13,642	22,624	13,936	22,008	13,207	29,321	19,303	31,527	21,726
18 and over	7,072	2,290	8,249	2,901	7,279	2,662	10,374	4,196	12,016	5.214
Not stated(*a*)	1,549	1,540	..	..	..	..	..	..	..	..
Total	**1,225,048**	**1,141,731**	**1,259,882**	**1,177,770**	**1,295,690**	**1,208,640**	**1,339,893**	**1,248,446**	**1,375,923**	**1,282,676**

(*a*) Comprises Aboriginal children at special schools whose ages were not collected in 1964.

Grades of pupils

The numbers of pupils enrolled in grades in each State and Territory are shown in the following table. The grading of pupils differs for the various school systems in Australia because of the differences in curricula set by education departments. In addition, the methods of allocating classes to

SCHOOL PUPILS, BY AGE GROUP: AUSTRALIA

1964 TO 1968

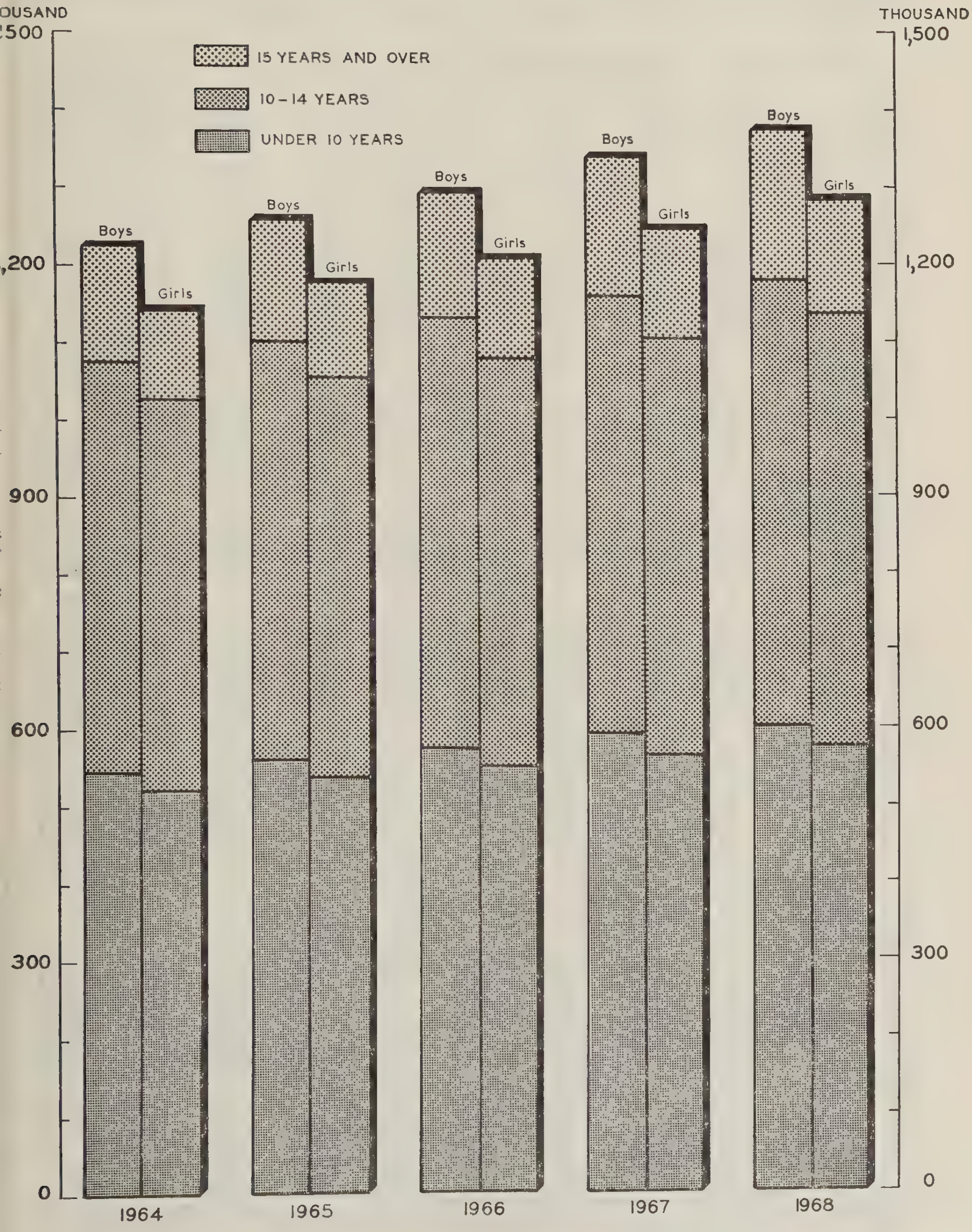


PLATE 33

grades vary from State to State, and there are also differences in the administrative methods of aggregating grades of a more or less similar nature. The figures presented in the table represent essentially the system of grading adopted in each different State and are therefore not comparable between States. Pupils not allocated to grades (i.e. physically, mentally, or socially handicapped children) are shown as being in special grades or schools or as 'ungraded'. However, the numbers shown in special grades or ungraded should not be taken as the total number of handicapped pupils in a State because some handicapped children are included in normal grades.

GOVERNMENT AND NON-GOVERNMENT SCHOOLS: PUPILS, BY GRADE, ETC. AND SEX, STATES AND TERRITORIES, 1968

Grade, year or form	*Government schools*			*Non-government schools*			*All schools*		
	Boys	*Girls*	*Total*	*Boys*	*Girls*	*Total*	*Boys*	*Girls*	*Total*
				NEW SOUTH WALES					
Infants—									
Kindergarten	35,916	33,551	69,467	10,052	9,929	19,981	45,968	43,480	89,448
1	41,077	37,371	78,448	10,394	10,066	20,460	51,471	47,437	98,908
2	37,038	34,079	71,117	10,276	10,172	20,448	47,314	44,251	91,565
Primary—									
3	34,383	32,091	66,474	9,715	9,913	19,628	44,098	42,004	86,102
4	33,368	31,917	65,285	9,488	9,503	18,991	42,856	41,420	84,276
5	33,022	31,246	64,268	9,614	9,755	19,369	42,636	41,001	83.637
6	32,579	30,436	63,015	—9,593	9,700	19,293	42,172	40,136	82,308
Special primary grades(*a*)	5,143	3,487	8,630	1,109	987	2,096	6,252	4,474	10,726
Secondary—									
Form I (or 7)	31,952	29,904	61,856	8,980	9,459	18,439	40,932	39,363	80,295
Form II (or 8)	31,229	28,872	60,101	8,633	9,249	17,882	39,862	38,121	77,983
Form III (or 9)	24,681	23,040	47,721	7,874	8,537	16,411	32,555	31,577	64,132
Form IV	19,825	17,434	37,259	7,304	7,623	14,927	27,129	25,057	52,186
Form V	9,226	6,476	15,702	4,160	2,955	7,115	13,386	9,431	22,817
Form VI	7,984	5,258	13,242	3,623	2,455	6,078	11,607	7,713	19,320
Special secondary grades(*a*)	652	185	837	..	..	..	652	185	837
Correspondence school pupils	1,161	1,190	2,351	..	..	..	1,161	1,190	2,351
Total	**379,236**	**346,537**	**725,773**	**110,815**	**110,303**	**221,118**	**490,051**	**456,840**	**946,891**
				VICTORIA					
Primary—									
1(*b*)	55,599	51,207	106,806	15,117	15,061	30,178	70,716	66,268	136,984
2	26,892	24,871	51,763	8,439	8,457	16,896	35,331	33,328	68,659
3	25,500	23,628	49,128	8,312	8,447	16,759	33,812	32,075	65,887
4	25,208	23,408	48,616	8,558	8,393	16,951	33,766	31,801	65,567
5	24,477	22,995	47,472	8,301	8,279	16,580	32,778	31,274	64,052
6	24,280	22,640	46,920	8,190	8,405	16,595	32,470	31,045	63,515
Ungraded(*c*)	1,542	870	2,412	122	176	298	1,664	1,046	2,710
Secondary—									
7 or I	25,564	22,426	47,990	7,064	8,539	15,603	32,628	30,965	63,593
8 or II	24,790	21,696	46,486	6,825	8,179	15,004	31,615	29,875	61,490
III	23,092	19,426	42,518	6,218	7,701	13,919	29,310	27,127	56,437
IV	19,196	15,805	35,001	5,886	6,892	12,778	25,082	22,697	47,779
V	12,528	9,631	22,159	5,098	5,449	10,547	17,626	15,080	32,706
VI	4,791	3,776	8,567	3,581	2,884	6,465	8,372	6,660	15,032
Total	**293,459**	**262,379**	**555,838**	**91,711**	**96,862**	**188,573**	**385,170**	**359,241**	**744,411**
				QUEENSLAND					
Primary—									
Preparatory	29	34	63	309	304	613	338	338	676
1	17,308	15,635	32,943	4,552	4,346	8,898	21,860	19,981	41,841
2	16,330	15,003	31,333	4,284	4,045	8,329	20,614	19,048	39,662
3	14,848	14,151	28,999	4,013	4,082	8,095	18,861	18,233	37,094
4	15,043	13,811	28,854	3,865	3,930	7,795	18,908	17,741	36,649
5	14,531	13,507	28,038	3,660	3,748	7,408	18,191	17,255	35,446
6	14,202	13 462	27,664	3,706	3,717	7,423	17,908	17,179	35,087
7	14,134	12,819	26,953	3,709	3,926	7,635	17,843	16,745	34,588
Ungraded(*a*)	1,466	740	2,206	32	34	66	1,498	774	2,272
Secondary—									
8	12,769	12,013	24,782	4,243	4,192	8,435	17,012	16,205	33,217
9	11,894	11,248	23,142	4,041	4,150	8,191	15,935	15,398	31,333
10	10,578	9,519	20,097	3,802	3,848	7,650	14,380	13.367	27,747
11	3,304	2,428	5,732	2,329	1,770	4,099	5,633	4,198	9,831
12	2,655	1,967	4,622	2,116	1,454	3,570	4,771	3,421	8,192
Total	**149,091**	**136,337**	**285,428**	**44,661**	**43,546**	**88,207**	**193,752**	**179,883**	**373,635**

(*a*) Pupils in special classes at ordinary schools and ungraded pupils at special schools. (*b*) In Victoria, owing to differences in ages of commencing school, many younger children may not reach grade 2 until they have been at school for two years. (*c*) All pupils at special schools.

GOVERNMENT AND NON-GOVERNMENT SCHOOLS: PUPILS, BY GRADE, ETC. AND SEX, STATES, ETC., 1968—*continued*

Grade, year or form	*Government schools*			*Non-government schools*			*All schools*		
	Boys	*Girls*	*Total*	*Boys*	*Girls*	*Total*	*Boys*	*Girls*	*Total*
				SOUTH AUSTRALIA					
Pre-primary	..	..	..	84	128	212	84	128	212
Primary—									
Preparatory(*a*)	3,237	3,037	6,274	..	..	..	3,237	3,037	6,274
I	11,598	10,569	22.167	1,810	1,782	3,592	13,408	12,351	25,759
II	11,320	10,574	21,894	1,545	1,613	3,158	12,865	12,187	25,052
III	11,139	10,427	21,566	1,533	1,656	3,189	12,672	12,083	24,755
IV	10,694	10,259	20,953	1,465	1,627	3,092	12,159	11,886	24,045
V	10,536	9,790	20,326	1,523	1,659	3,182	12,059	11,449	23,508
VI	10,398	9,915	20,313	1,545	1,625	3,170	11,943	11,540	23,483
VII	9,920	9,597	19,517	1,665	1,738	3,403	11,585	11,335	22,920
Ungraded(*b*)	1,423	898	2,321	13	15	28	1,436	913	2,349
Secondary—									
VIII or 1st	10,304	9,448	19,752	1,603	1,726	3,329	11,907	11,174	23,081
IX or 2nd	9,524	8,856	18,380	1,510	1,622	3,132	11,034	10,478	21,512
X or 3rd	8,505	7,548	16,053	1,554	1,635	3,189	10,059	9,183	19,242
XI or 4th	5,209	4,017	9,226	1,293	1,163	2,456	6,502	5,180	11,682
5th	1,926	1,112	3 038	923	570	1,493	2,849	1,682	4,531
Ungraded(*c*)	149	90	239	..	..	..	149	90	239
Total	**115,882**	**106,137**	**222,019**	**18,066**	**18,559**	**36,625**	**133,948**	**124,696**	**258,644**
				WESTERN AUSTRALIA					
Primary—									
Kindergarten	..	..	..	159	170	329	159	170	329
1	9,397	8,286	17,683	1,951	1,969	3,920	11,348	10,255	21,603
2	8,857	8,024	16,881	1,810	1,899	3,709	10,667	9,923	20,590
3	8,445	7,836	16,281	1,717	1,871	3,588	10,162	9,707	19,869
4	8,225	7,716	15,941	1,585	1,794	3,379	9,810	9,510	19,320
5	8,024	7,507	15,531	1,529	1,819	3,348	9,553	9,326	18,879
6	8,174	7,463	15,637	1,580	1,754	3,334	9,754	9,217	18,971
7	8,065	7,082	15,147	1,583	1,894	3,477	9,648	8,976	18,624
Special classes	807	372	1,179	..	..	..	807	372	1,179
Secondary—									
1	7,811	7,007	14,818	1,975	2,266	4,241	9.786	9,273	19,059
2	6,942	6,413	13,355	1,804	2,084	3,888	8,746	8,497	17,243
3	6,091	5,643	11,734	1,690	2,003	3,693	7,781	7,646	15,427
4	1,896	1,503	3,399	1,028	996	2,024	2,924	2,499	5,423
5	1,362	1,000	2,362	856	769	1,625	2,218	1,769	3,987
Special classes	333	189	522	..	..	..	333	189	522
Special schools(*d*)	573	373	946	8	5	13	581	378	959
Total	**85,002**	**76,414**	**161,416**	**19,275**	**21,293**	**40,568**	**104,277**	**97,707**	**201,984**
				TASMANIA					
Pre-school	1,464	1,397	2,861	89	100	189	1,553	1,497	3,050
Primary—									
Kindergarten	1,240	1,141	2,381	437	509	946	1,677	1,650	3,327
1	4,985	4,336	9,321	747	740	1,487	5,732	5,076	10,808
2	3,966	3,788	7,754	575	571	1,146	4,541	4,359	8,900
3	3,675	3,537	7,212	571	598	1,169	4,246	4,135	8,381
4	3,747	3,409	7,156	571	659	1,230	4,318	4,068	8,386
5	3,612	3,332	6,944	604	599	1,203	4,216	3,931	8,147
6	3,605	3,366	6,971	567	738	1,305	4,172	4,104	8,276
Secondary—									
I	3,691	3,421	7,112	727	733	1,460	4,418	4,154	8,572
II	3,296	3,125	6,421	627	714	1,341	3,923	3,839	7,762
III	2,970	2,963	5,933	586	707	1,293	3,556	3,670	7,226
IV	1,912	1,635	3,547	658	629	1,287	2,570	2,264	4,834
V(*e*)	557	486	1,043	278	260	538	835	746	1,581
VI(*e*)	448	260	708	210	143	353	658	403	1,061
Special schools(*d*)	456	289	745	..	27	27	456	316	772
Total	**39,624**	**36,485**	**76,109**	**7,247**	**7,727**	**14,974**	**46,871**	**44,212**	**91,083**

(*a*) 'Preparatory' refers to children who commenced school at the mid-year intake. (*b*) Relates to occupation centres, opportunity classes, speech and hearing classes, and children in schools at spastic centres. (*c*) Speech and hearing classes and opportunity classes. (*d*) All pupils at special schools for physically and mentally handicapped or delinquent children. (*e*) The final secondary school grade may be taken in one year (Year V) or spread over two years (Years V and VI).

GOVERNMENT AND NON-GOVERNMENT SCHOOLS: PUPILS, BY GRADE, ETC. AND SEX, STATES, ETC., 1968—*continued*

NORTHERN TERRITORY

Grade, year or form	*Government schools*			*Non-government schools*			*All schools*		
	Boys	*Girls*	*Total*	*Boys*	*Girls*	*Total*	*Boys*	*Girls*	*Total*
Primary—									
Preparatory(*a*)	155	149	304	..	..	..	155	149	304
I	592	500	1,092	94	105	199	686	605	1,291
II	503	461	964	72	81	153	575	542	1,117
III	459	408	867	73	79	152	532	487	1,019
IV	423	380	803	77	68	145	500	448	948
V	327	362	689	57	52	109	384	414	798
VI	375	334	709	60	66	126	435	400	835
VII	311	300	611	40	46	86	351	346	697
Ungraded(*b*)	1,403	1,338	2,741	772	782	1,554	2,175	2,120	4,295
Secondary—									
VIII or 1st	287	277	564	42	34	76	329	311	640
IX or 2nd	234	227	461	22	21	43	256	248	504
X or 3rd	173	176	349	14	13	27	187	189	376
XI or 4th	65	49	114	..	..	..	65	49	114
5th	36	9	45	..	..	..	36	9	45
Ungraded(*b*)	13	12	25	..	..	..	13	12	25
Total	**5,356**	**4,982**	**10,338**	**1,323**	**1,347**	**2,670**	**6,679**	**6,329**	**13,008**

AUSTRALIAN CAPITAL TERRITORY

Grade, year or form	*Government schools*			*Non-government schools*			*All schools*		
	Boys	*Girls*	*Total*	*Boys*	*Girls*	*Total*	*Boys*	*Girls*	*Total*
Infants—									
Kindergarten	1,139	1,103	2,242	385	397	782	1,524	1,500	3,024
1	1,192	1,034	2,226	422	402	824	1,614	1,436	3,050
2	1,145	975	2,120	423	400	823	1,568	1,375	2,943
Primary—									
3	968	930	1,898	404	353	757	1,372	1,283	2,655
4	967	907	1,874	364	324	688	1,331	1,231	2,562
5	893	842	1,735	356	314	670	1,249	1,156	2,405
6	868	820	1,688	343	347	690	1,211	1,167	2,378
Special primary grades(*c*)	83	80	163	..	..	..	83	80	163
Secondary—									
Form I	811	805	1,616	378	344	722	1,189	1,149	2,338
Form II	763	691	1,454	361	293	654	1,124	984	2,108
Form III	625	641	1,266	335	256	591	960	897	1,857
Form IV	616	498	1,114	274	268	542	890	766	1,656
Form V	350	308	658	197	138	335	547	446	993
Form VI	331	201	532	182	97	279	513	298	811
Total	**10,751**	**9,835**	**20,586**	**4,424**	**3,933**	**8,357**	**15,175**	**13,768**	**28,943**

(*a*) 'Preparatory' refers to children who commenced school at the mid-year intake. (*b*) Relates to opportunity classes, classes for physically handicapped children, and Aboriginal children at special schools at settlements, missions and on pastoral properties. (*c*) Pupils in special classes at ordinary schools and ungraded pupils at special schools.

Other aspects of school education

Information relating to school medical and dental services is given in the chapter Public Health, and particulars of school savings banks in the chapter Private Finance.

Provisions for isolated areas

Although the task of bringing education to isolated areas in Australia presents problems, all education authorities have aimed at providing opportunities for country children comparable to those available to city children. Country children follow the same curricula (with local adaptation, if desirable) and are under the guidance of teachers who are trained for service in country and city schools alike.

In areas where there are sufficient children of school age a 'one-teacher' school may be formed with all primary grades in a single classroom under the control of the one teacher. Special training is given to teachers undertaking work of this kind. Children who complete a primary course in a one-teacher school and cannot attend a secondary school may do secondary correspondence lessons under the teacher's supervision.

In districts where a number of small centres are scattered around a larger centre or country town the tendency is to close the one-teacher schools and transport pupils each day by buses to a 'consolidated' school in the larger centre. Consolidated schools provide primary instruction and from two to four years of post-primary instruction. The post-primary curriculum adopted is usually directed towards practical activities and training in subjects bearing on the primary industries of the locality.

Where a group of children is too small to warrant the establishment of a one-teacher school at public expense, a 'subsidised' school may be opened. The education department pays part of the cost and in some States appoints a teacher. Some States also administer 'provisional' schools, which are completely financed by the government but which are not large enough, or sufficiently assured of adequate continued attendance of pupils, to warrant classification as permanent schools.

Correspondence schools. These have been established in each State capital city to meet the needs of children whose daily attendance at school is prevented by distance between home and school, by illness or by physical disability. The correspondence schools also cater for inmates of penal institutions, Australian children overseas, pupils of other schools in which particular courses are not available, and, as well, for members of the Defence Forces and other adults completing their secondary education. Where children are involved, lessons are done with the help of a supervisor, usually a member of the child's family, and posted back to the correspondence school in the capital city, where they are corrected and returned with comments. Every endeavour is made to maintain a personal link between teacher and pupil. Correspondence schools began with primary grades only, but were soon extended to cater for secondary pupils, and it is now possible to do a complete secondary course to matriculation standard by correspondence. Each year more than 20,000 students receive all or part of their instruction by correspondence.

Schools of the air. These are intended to give the outback child of school age some of the benefits of school life and to supplement correspondence education. The schools of the air keep the various correspondence schools informed of the progress of their pupils. Using the two-way wireless equipment developed first by the Royal Flying Doctor Service, children hundreds of miles apart participate in the same lesson, and teacher and pupils can talk directly with each other. The first school of the air was established in 1951 at Alice Springs in the Northern Territory; it has been followed by similar schools at Broken Hill in the far west of New South Wales; Ceduna and Port Augusta in South Australia; Charleville, Mount Isa and Charters Towers in Queensland; Meekatharra, Derby, Kalgoorlie, and Port Hedland in Western Australia; and Katherine in the Northern Territory. These twelve schools serve children in an area of a million square miles.

Handicapped children

Some provision is made for the education of physically and mentally handicapped children, both by the State authorities and by church and voluntary organisations, often working in conjunction. In some cases, where residential schools are necessary for particular groups, educational facilities and teaching staff are provided by a State education department, while a voluntary organisation provides accommodation and accepts responsibility for the general welfare of the children. Among the facilities available are: hospital schools for sick and crippled children; 'spastic centres' for cerebral palsied children; schools and classes for deaf children; schools for blind children; and special schools and classes for mentally retarded children. Special schools and classes have involved the appointment of departmental specialists, the provision of special courses for the training of teachers of the deaf in New South Wales and Victoria, a training course for teachers of the mentally and physically handicapped at Melbourne Teachers College, and close liaision wth school health services. In some States, clinics attached to hospitals, or functioning as an independent child welfare service, handle cases of personality maladjustment and work in co-operation with the psychological services of the education departments.

Physical education and National Fitness Councils

Each education department has a physical education branch which guides and develops physical education in schools and maintains liaison with the State National Fitness Council. Physical education includes not only organised instruction but also sports, swimming, folk-dancing, and camping.

Trainee primary teachers at State teachers colleges learn to teach all the subjects in the syllabus, including physical education. For secondary schools, courses designed to train physical education teachers are offered in universities in all the States, and in four States at teachers colleges as well.

The State National Fitness Councils, with the help of Commonwealth and State government grants, train voluntary youth leaders, develop community playing areas and facilities, open play centres for school children on vacation, and maintain camps for schools and youth groups.

Educational guidance

Each Australian State has a system of educational guidance administered by educational psychologists. The functions of these services are to provide advice on suitability of various secondary studies for particular children, diagnosis and guidance of atypical children, preliminary guidance, and, in some States, research. The weight given to each of these functions varies from State to State, but the aim is to provide educational guidance for all children.

Throughout Australia branches of the Commonwealth Employment Service co-operate with State education departments by giving post-school vocational guidance, using the data obtained during the school careers of the children and made available by the education departments. In New South Wales a similar service is also provided by the Vocational Guidance Bureau of the State Department of Labour and Industry.

Research

All State education departments have branches undertaking research directed towards departmental activities. The work of the research branches is concerned with such matters as curriculum content, new teaching methods, evaluation procedures, wastage rates, and educational statistics. Education research is also carried out by the faculties and departments of education in the universities, the Commonwealth Department of Education and Science and the Australian Council for Educational Research.

School broadcasting and television

Over the years a school broadcasting system has been developed in Australia by the co-operative efforts of the Australian Broadcasting Commission and education authorities. The Australian Broadcasting Commission's Education Department is responsible for preparing and broadcasting programmes, but it draws on the advice and services of teachers and maintains permanent liaison with State education departments. In 1968, 92 per cent of Australian schools were equipped to receive radio broadcasts.

Most school broadcasts are presented as part of the regular Australian Broadcasting Commission programmes without separate stations or wave lengths. Special efforts are made to relate the broadcasts to school work by the extensive distribution of booklets, giving details of programmes in advance, and subject notes accompanied by picture sheets, work books, and teachers' notes. Broadcasting has proved to be an effective way of reaching the outback children of Australia, and radio lessons have been designed to supplement correspondence lessons.

In the years 1967 and 1968 there was an increase in the number of schools receiving television broadcasts and in the number of programmes produced. The Australian Broadcasting Commission has increased its output of school television programmes, especially instructional programmes in mathematics and science for secondary schools. Direct teaching lessons designed for the senior forms were presented. At the same time most education departments began to subsidise the purchase of television sets, and by mid 1968 approximately 4,200 Australian schools were equipped to use educational television programmes.

Scholarships and bursaries

All States have schemes of financial assistance to school pupils, mostly at the secondary level, through scholarships or bursaries. As tuition in government schools is free, this assistance is usually in the form of maintenance allowances, both for children living with their parents and for those living away from home. These may be paid in a lump sum or in instalments throughout the year. Awards are usually made on the results of a competitive examination, and sometimes a means test is applied. Other government and private authorities, such as the Repatriation Department and the Legacy War Orphans Fund, assist certain categories of pupils with their school education. Many non-government schools also award scholarships, on a competitive basis, which enable students to attend the particular schools without payment of fees.

In 1964 the Commonwealth Government, with the co-operation of the State departments of education, introduced a programme of secondary scholarships to encourage successful candidates to complete the final two years of secondary schooling. Ten thousand of these scholarships are awarded each year. Further details of the Commonwealth secondary scholarship scheme and the Commonwealth technical scholarship scheme are given on page 526.

Sudsidised transport to and from school

All the States have systems of subsidies by which transport is free or at a concession rate for children who have to travel to and from school daily. In some States an allowance is paid if private transport has to be used.

Subsidies to children living away from home

For children whose homes are too far away from a secondary school to allow daily travel, some States run hostels or give financial assistance to privately owned hostels. The States also pay boarding allowances to the holders of State bursaries or scholarships and in some cases, agricultural scholarships include free board at an agricultural high school.

School buildings

The increase in the school population in the last decade led to an expansion in school building. To cope with this growth in population, it has been necessary to make use of temporary and emergency structures. Quite large schools are being built in stages to match increases in local population in new and rapidly developing suburbs in metropolitan areas. Authorities are giving attention to the use of new materials and to the planning of sites. Gymnasiums which may also serve as assembly halls are sometimes included, and lighting, heating and ventilation to meet different climatic conditions are planned. For details of assistance provided by the Commonwealth for the building and equipping of science laboratories, *see* page 527.

Textbooks, materials and other equipment

The State education departments supply government schools, free of charge, with essential equipment, including scientific apparatus, maps, blackboards, chalk, and cleaning materials, and non-consumable equipment for commercial, home science and manual training. Garden tools and physical training equipment are also supplied in most States. Readers and writing equipment for individual pupils are sometimes supplied free in primary schools, and several education departments produce monthly school magazines which are supplied free or at a nominal price. In primary schools (except in one State where textbooks are made available free to children in both government and non-government primary schools) and in secondary schools, textbooks must, however, be purchased by students. In several States, schools own stocks of textbooks which are hired to students, and in one State, secondary textbooks are sold at reduced prices. In four States certain textbook costs are subsidised for pupils attending government and non-government schools. The parent and citizen organisations, with the assistance of subsidies from the education departments, are usually responsible for providing equipment such as radios and television sets, film strip projectors, pianos, duplicators and, in particular, library books.

The design of school furniture is undergoing change following research on posture and the physical measurement of children. Dual desks are now being replaced in many schools by individual tables and chairs, provided in a range of sizes suitable for each class. In line with modern educational practice, the new type of furniture has been designed to allow more flexible arrangements of the classroom.

Visual aids

Each of the State education departments has a visual education branch to handle the production and distribution of such materials. Film strips and posters are distributed free or at low cost. Films are held in central libraries and are requisitioned by schools as required for teaching purposes.

Pre-school education

Pre-school centres are maintained by voluntary organisations such as the kindergarten unions, churches, and committees of interested citizens. Over the years an increasing amount of financial assistance has been provided by State governments to approved pre-school centres. Grants are available for teachers' salaries and, in some areas, towards buildings and equipment. In the mainland territories of Australia and in Papua/New Guinea, the Commonwealth Government provides pre-school centres and employs the teachers, but parents assist in the provision of equipment.

The Australian Pre-school Association is a national body whose members seek to promote the health and welfare of young children. It aims to co-ordinate and strengthen pre-school education. It is responsible for the administration, on behalf of the Commonwealth Government, of six Lady Gowrie Child Centres for child-study and demonstration.

Pre-school centres are located in city and country areas, and programmes are adapted to meet the needs of the children attending. A typical pre-school centre provides half-day sessions for children. Crèches and day-nurseries provide full-day care in closely settled areas. In a few centres, occasional or residential care is available. During the past ten years the number of children attending pre-schools in Australia has increased.

Radio and television bring a form of education within the reach of practically every pre-school child in Australia. The Australian Broadcasting Commission pioneered the programme 'Kindergarten of the Air', a session of twenty-five minutes each week-day broadcast throughout the country and overseas through Radio Australia. This session was designed to reach children in isolated areas. The half-hour television programme 'Play-school' is also available each week-day to children of kindergarten age in all State capital cities and in many country regions.

Technical education

The following description of technical education refers to training in technical fields given by institutions other than secondary schools and universities. Students may proceed to this kind of training after completing three to five years at secondary school. Each State has developed a system of technical education based on institutions set up in all the State capital cities and in some country areas. These institutions are known variously as technical colleges, institutes of technology and schools of mines. The earliest began as local and even private ventures in the second half of the nineteenth century, but almost all of them have now come under the control of the State governments.

The technical colleges in Queensland, South Australia, Western Australia, and Tasmania are administered by branches of the State education departments. In Western Australia and South Australia the Institutes of Technology function as autonomous institutions. New South Wales has a separate State Department of Technical Education. In Victoria there is a dual system with a number of the older colleges controlled by their own 'councils' in addition to government-controlled colleges administered by the Technical Education Branch of the Education Department. The council-controlled colleges receive government grants-in-aid. The diploma awarding schools or sections of technical institutions are in process of being separated from the trade, certificate and other sections of technical education, and of being developed as colleges of advanced education. Most of the diploma and other tertiary courses of technical institutions are now receiving Commonwealth financial assistance under the arrangements covering colleges of advanced education as outlined on pages 521-2.

Australian technical colleges offer training in all the major industrial skills and in a wide variety of commercial, artistic and domestic occupations. The three main types of courses are described in the following paragraphs.

Trade courses

These offer part-time training for apprentices. In developing a system of technical education, the Australian authorities took cognisance of the British tradition which regards practical experience on the job as the fundamental training procedure, to be supplemented by theoretical and practical training at an appropriate school. In each of the Australian States there is an apprenticeship authority which supervises the administration of apprenticeships, and an education authority which provides technical education through its technical colleges.

Most students who wish to become tradesmen leave school on the completion of three or four years of secondary schooling at about sixteen years of age. An increasing proportion, however, is entering at higher educational levels and receiving credit for this. On entering apprenticeship in one of the trades, the young apprentice is required to enrol in an appropriate trade course in one of the network of technical colleges in capital cities and large country towns.

The time spent on training varies from three to five years in different trades and States. Between four and eight hours' instruction a week is required. Much of this takes place in the employer's time, and it is unusual for more than two hours a week to be spent in attending classes outside working hours.

Certificate courses

These courses are designed to provide training in technical occupations and in some cases can be counted towards a diploma course. Certificate courses vary in length from State to State, but generally they last from two to seven years. Attendance may be full-time for all or part of the course, or wholly part-time. Usually there are no occupational requirements for admission to a certificate course, and students who have completed a related trade course may be admitted together with other students to a certificate course. Educational requirements in most cases specify possession of an Intermediate level examination certificate, which may need to include passes at appropriate levels in certain specified subjects. In addition, in New South Wales the Department of Technical Education conducts the Certificate Entrance Examination, a pass in which qualifies a student for attendance at a technical college. Courses are offered in subjects such as accountancy, industrial electronics, wool classing and architectural drafting.

Diploma courses

The diploma courses which generally have a vocational emphasis cover a range of subjects including art, architecture, business studies, engineering, agriculture, applied science, pharmacy, and librarianship. Study may be undertaken on a full-time or part-time basis and three years full-time, or its equivalent, is the normal minimum length of a course. One full year of employment in an appropriate occupation is a requirement before certain qualifications may be obtained.

Other technical courses

Most colleges provide short post-diploma and refresher courses to keep students in touch with new developments in their fields, as well as courses of general interest, such as handicrafts and motor mechanics. Training in certain technical aspects of agriculture such as farm mechanics and wool classing is often given in the technical colleges. Some also offer general secondary courses to enable adults to prepare for matriculation and other public examinations.

Technical correspondence teaching

Each State has a system of technical education by correspondence to extend the facilities of a metropolitan college to rural students. Entrance qualifications are identical with those for the regular classes. A major problem of correspondence work is the linking of theory with practice. This is overcome to a certain extent by holding practical sessions at appropriate training centres once or twice a year at the technical college where the correspondence school is based, or at a mobile workshop stationed for the time at a focal point within the district. In New South Wales these mobile workshops are rail cars equipped with machinery and fittings to make them self-contained training schools for engineering and other trades. Among practical courses offered by correspondence are trade drawing, fitting and machinery, welding, diesel engine operation, automotive engineering and workshop practice, and farm mechanics.

Technical colleges, teachers and students

The numbers of colleges, teachers and enrolments during the years 1963 to 1967 are given in the following table. The statistics include senior technical schools and colleges, institutes of technology and colleges of advanced education providing technical education, and their teachers and students at all levels.

TECHNICAL EDUCATION: COLLEGES, TEACHERS AND ENROLMENTS
STATES AND TERRITORIES, 1963 TO 1967

		Teachers			*Students enrolled*		
State or Territory	*Colleges*	*Full-time*	*Part-time*	*Total*	*Males*	*Females*	*Persons*
New South Wales(*a*)(*b*)(*c*)(*d*)—							
1963	52	1,474	2,732	4,206	87,477	40,219	127,696
1964	53	1,535	3,099	4,634	94,663	41,022	135,685
1965	54	1,570	3,140	4,710	98,840	41,377	140,217
1966	54	1,625	3,566	5,191	104,839	44,774	149,613
1967	57	1,747	3,623	5,370	108,160	48,985	157,145
Victoria(*e*)—							
1963(*f*) . . .	73	3,080	2,290	5,370	50,325	13,456	63,781
1964(*f*) . . .	73	3,378	2,363	5,741	52,031	13,399	65,430
1965	79	3,724	2,586	6,310	n.a.	n.a.	79,287
1966	82	4,151	2,639	6,790	n.a.	n.a.	82,230
1967	83	4,339	2,788	7,127	n.a.	n.a.	84,259
Queensland(*d*)—							
1963	15	229	977	1,206	29,044	12,860	41,904
1964	15	235	1,067	1,302	31,082	12,002	43,084
1965(*g*) . . .	14	308	921	1,229	29,715	6,740	36,455
1966	16	389	1,004	1,393	28,269	5,520	33,789
1967	18	481	889	1,370	21,829	2,091	23,920

For footnotes *see* next page.

TECHNICAL EDUCATION: COLLEGES, TEACHERS AND ENROLMENTS STATES AND TERRITORIES, 1963 TO 1967—*continued*

		Teachers			*Students enrolled*		
State or Territory	*Colleges*	*Full-time*	*Part-time*	*Total*	*Males*	*Females*	*Persons*
South Australia—							
1963(*h*) . . .	24	453	954	1,407	18,661	11,291	(*h*)34,330
1964(*h*) . . .	25	462	1,101	1,563	19,956	11,503	(*h*)35,937
1965(*h*) . . .	25	520	1,153	1,673	21,805	13,214	(*h*)39,856
1966(*h*) . . .	25	549	1,214	1,763	21,685	14,332	(*h*)41,190
1967(*h*) . . .	25	682	1,248	1,930	n.a.	n.a.	(*h*)39,188
Western Australia(*d*)(*i*)—							
1963	32	373	1,257	1,630	30,251	15,362	45,613
1964	32	444	1,398	1,842	34,399	16,711	51,110
1965	36	505	1,632	2,137	37,326	18,114	55,440
1966	36	606	1,710	2,316	39,161	19,396	58,557
1967	36	658	1,834	2,492	41,168	20,362	62,530
Tasmania—							
1963	11	104	438	542	5,491	1,994	7,485
1964	11	110	498	608	5,520	2,023	7,543
1965	12	146	442	588	5,501	2,110	7,611
1966	11	154	591	745	5,433	2,229	7,662
1967	10	173	614	787	5,580	2,264	7,844
Northern Territory—							
1963	2	1	66	67	706	552	1,258
1964	2	1	72	73	712	579	1,291
1965	2	1	100	101	947	942	1,889
1966	2	1	112	113	1,032	930	1,962
1967	2	6	153	159	993	1,314	2,307
Total—							
1963(*h*) . . .	**209**	**5,714**	**8,714**	**14,428**	**221,955**	**95,734**	**(*h*)322,067**
1964(*h*) . . .	**211**	**6,165**	**9,598**	**15,763**	**238,363**	**97,239**	**(*h*)340,080**
1965(*h*) . . .	**222**	**6,774**	**9,974**	**16,748**	**n.a.**	**n.a.**	**(*h*)360,755**
1966(*h*) . . .	**226**	**7,475**	**10,836**	**18,311**	**n.a.**	**n.a.**	**(*h*)375,003**
1967(*h*) . . .	**231**	**8,086**	**11,149**	**19,235**	**n.a.**	**n.a.**	**(*h*)377,193**

(*a*) Students enrolled represent gross enrolments, no allowance having been made for students enrolled in more than one course. (*b*) Includes Australian Capital Territory. Gross enrolments at Canberra Technical College were as follows: 1963, 2,895; 1964, 3,551; 1965, 4,267; 1966, 4,855; 1967, 5,578. (*c*) Figures include teachers and students at technical colleges and other centres, such as high school classrooms, in which technical classes are conducted. (*d*) Includes correspondence course teachers and students. (*e*) Teachers include those at both senior and junior technical colleges. (*f*) Student enrolment figures for 1963 and 1964 are not comparable with those shown for later years because as from 1965 students taking single subjects only were included and the census date was altered from 1 August to 31 May. (*g*) The figures for 1965 reflect the major reorganisation of technical education introduced at the beginning of the year. In addition to the establishment of the Institute of Technology entrv standards were raised, and the minimum number of students required to commence classes was also raised. (*h*) Total students includes students enrolled in correspondence courses. Teacher figures include correspondence course teachers. (*i*) Teachers represent number of teaching positions.

Teacher education

State education departments recruit most prospective teachers for government service from students leaving schools after a secondary course. Each department offers training awards annually on the basis of academic merit and personal suitability. These awards cover the cost of a teacher training course (which may include university studies) and provide a living allowance. Students are usually required to enter into an agreement to serve for a specified number of years in the government schools of the State where they have trained. In some States intending teachers can obtain a scholarship at the first public secondary examination to enable them to complete teachers college entrance requirements. Such an award entails a bond of service for a longer period.

The State education departments conduct teachers colleges to train teachers for government schools. These colleges are co-educational and, in the larger States, have been established in country areas as well as in cities. The principal and staff of the colleges are responsible to the Director-General of Education in the State concerned. Teachers colleges are also conducted by other organisations.

The following table shows the number of teachers colleges, i.e. institutions set up to provide courses of professional teacher training for pre-schools and schools, including technical schools. The institutions covered are the government teachers colleges, denominational and independent teacher training colleges, and kindergarten training colleges.

NUMBER OF TEACHERS COLLEGES, 1968(a)

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	A.C.T.	Aust.
Government—								
Primary only . .	2	6	1	1	1	..	..	11
Secondary only .	..	3	..	2	1	..	..	6
Primary and secondary	6	3	1	2	1	2	..	15
Total government colleges . .	*8*	*12*	*2*	*5*	*3*	*2*	..	*32*
Non-government—								
Kindergarten . .	2	1	1	1	1	..	..	6
All other . . .	9	6	1	..	..	..	1	17
Total colleges .	**19**	**19**	**4**	**6**	**4**	**2**	**1**	**55**

(a) There are no teachers colleges in the Northern Territory. The figures do not include the Australian School of Pacific Administration (*see* page 524).

Teachers for government schools

Training of primary school teachers. In most States teachers for government primary schools are trained in teachers colleges. A minimum three year course for primary teachers is being introduced in all Australian States. The basic subjects taken in the various courses are history and principles of education, general and special methods of teaching in the primary school, school organisation, and educational psychology. In addition, students undertake courses in English (including speech training) mathematics, handicrafts, music, art, social studies, natural science, and physical and health education. Optional subjects may include dramatic art, visual aids, and so on. Supervised practice teaching in schools and the observation of demonstration lessons form part of all training courses. Since primary teachers in Australia may be called upon at some time to teach grouped classes in a small school or a 'one-teacher' school, special training for this kind of work is included in their course.

Training of secondary school teachers. Secondary teachers are normally specialists in a combination of subjects, such as english and history, modern languages, or mathematics and science. Intending secondary school teachers either obtain a university degree with additional professional teaching training such as a Diploma of Education, or are required to hold a diploma or certificate from a teachers college. Training also includes practice teaching under the supervision of teachers college and university staff, and the observation of demonstration lessons.

At several Australian universities, students wishing to take up teaching as a profession can receive their professional training along with the study of their teaching subjects as part of a first degree course in education. The time taken to complete such a Bachelor of Education degree course is three or four years.

Training for specialist teaching. Teachers of specialist subjects, such as music, art, manual arts, domestic science, and commercial subjects, receive from two to five years training which varies according to the institution concerned and the type of school in which the teacher is to serve. In several States the shorter courses are provided wholly by the teachers colleges. In five States teachers of music receive their specialist training at a conservatorium of music. Where the specialist course is given at an institution other than the teachers college—e.g. at a university, technical college, or conservatorium of music—as is usual for teachers of specialist subjects in high schools, students are required to attend teachers college or university lectures in education, and in some cases the specialist course is followed by a year of professional training. Courses designed to train physical education teachers are offered in universities in most States, and in at least one teachers college in every State.

Training for teachers of agricultural subjects in secondary schools is available in three States and consists of either an agricultural college diploma or a university degree course together with professional training. In Victoria there is a three-year agricultural college diploma course which follows on the normal two-year primary teachers course, whereas in Queensland students undertake a course at the Queensland Agricultural College, followed by two years of teacher education, one at university and one at a teachers college. In South Australia most students undertake a Bachelor of Science degree concurrently with professional training and with special training in agricultural science. Teachers of technical subjects in secondary schools may be trained in manual or industrial arts courses of two to four years' duration, at teachers colleges, technical colleges, or, in one State, at a university. These courses include basic training in such subjects as wood and metal work, and geometrical drawing. In Victoria there is a separate Technical Teachers College. Some teachers of trade subjects in technical schools are recruited from the ranks of qualified tradesmen engaged in industry or commerce. Upon appointment these teachers usually receive instruction in classroom teaching techniques and procedures.

The following table shows departmental students undergoing teacher education courses in 1968. Departmental students are those awarded State education department scholarships or fellowships and who have executed an agreement for periods of teaching service after completion of their teacher education. The table also shows private students at government colleges, including those sponsored by government departments other than State education departments. The figures exclude enrolments for short refresher courses and summer schools. The figures include 1,000 departmental students at various universities who have not been enrolled at a teachers college. Some students enrolled at universities may take part of their university course at a teachers college (e.g. graduate students in New South Wales undergoing a 'professional year' leading to the award by the university of Diploma in Education).

GOVERNMENT TEACHERS COLLEGES: ENROLMENTS, STATES, 1968(*a*)

	N.S.W.	Vic.(b)	Qld	S.A.	W.A.	Tas.	Australia		
							Males	*Females*	*Persons*
DEPARTMENTAL STUDENTS									
Attending teachers college and not enrolled elsewhere—									
For primary teaching—									
2 year course	2,524	2,377	1,946	1,217	845	242	2,406	8,919	11,325
3 year course	..	1,926	..		117	131			
Total	*2,524*	*4,303*	*1,946*	*1,217*	*962*	*373*	*2,406*	*8,919*	*11,325*
For secondary teaching—									
2 year course	692	..	534	..	23	17	335	931	1,266
3 year course	345	43	..	138	43	12	263	318	581
4 year and longer courses	..	669	..	73	..	..	417	325	742
Total	*1,037*	*712*	*534*	*211*	*66*	*29*	*1,015*	*1,574*	*2,589*
Enrolled at university or other institution—									
For primary teaching—									
2 year course	..	..	..	106	32	..	35	103	138
3 year course	..	14	..	162	..	..	56	120	176
4 year and longer courses	..	87	..	24	..	..	59	52	111
Total	..	*101*	..	*292*	*32*	..	*150*	*275*	*425*
For secondary teaching—									
2 year course	..	..	285	..	..	..	82	203	285
3 year course	..	412	72	521	124	10	363	776	1,139
4 year and longer courses	5,436	4,386	221	1,252	770	..	5,832	6,233	12,065
Total	*5,436*	*4,798*	*578*	*1,773*	*894*	*10*	*6,277*	*7,212*	*13,489*
Not specified as primary or secondary teaching—									
3 year course	..	..	..	..	..	97	42	55	97
4 year and longer courses	..	..	..	..	..	310	139	171	310
Total	..	..	..	..	..	*407*	*181*	*226*	*407*
Special courses(*c*)—									
For primary teaching—									
1 year course	..	94	..	..	..	..	35	59	94
2 year course	..	5	..	..	..	..	2	3	5
For secondary teaching—									
1 year course	..	22	88	..	7	..	66	51	117
Not specified—									
1 year course	..	..	..	..	..	20	9	11	20
2 year course	..	..	..	..	..	207	90	117	207
Total	..	*121*	*88*	..	*7*	*227*	*202*	*241*	*443*
Grand total—									
Primary	2,524	4,503	1,946	1,509	994	373	2,593	9,256	11,849
Secondary	6,473	5,532	1,200	1,984	967	39	7,358	8,837	16,195
Not specified	..	..	..	..	..	634	280	354	634
All departmental students	*8,997*	*10,035*	*3,146*	*3,493*	*1,961*	*1,046*	*10,231*	*18,447*	*28,678*
OTHER STUDENTS									
For primary teaching	27	33	11	54	39	3	66	101	167
For secondary teaching	165	50	2	28	2	..	91	156	247
Not specified	75	..	..	..	..	12	23	64	87
Total	*267*	*83*	*13*	*82*	*41*	*15*	*180*	*321*	*501*
Total students(*b*)(*d*)	**9,264**	**10,118**	**3,159**	**3,575**	**2,002**	**1,061**	**10,411**	**18,768**	**29,179**

(*a*) There are no government teachers colleges in the Australian Capital Territory and the Northern Territory. (*b*) Enrolments in part-time courses at the Technical Teachers College, Victoria, are excluded from this table. They comprise 354 departmental 'student instructors', 201 practising teachers from government schools and council controlled technical colleges, and 81 'other students'. The figures also exclude 245 Technical Teachers College students undergoing one or two years industrial experience. (*c*) Special courses are chiefly extension courses for students who have qualified as teachers and for practising teachers. Student enrolments are, (i) at teachers college only: Victoria, 92 in primary and 22 in secondary courses (and 38 practising teachers who have been excluded from the figures in the table); Queensland, this course is for students already holding approved subject qualifications; and (ii) at university or other institutions: Victoria, 7 (in primary courses); Western Australia, 7; and Tasmania, 227 in courses not specified as primary or secondary. (*d*) This table excludes 28 male and 17 female students enrolled in courses for primary teaching, and 64 male and 30 female students enrolled in courses for secondary teaching at the Australian School of Pacific Administration.

The following table shows departmental students enrolled in the first year of their courses and also those enrolled in the final year of their courses. The figures exclude enrolments in one year courses (*see* footnote (*c*) to the preceding table).

DEPARTMENTAL STUDENTS ENROLLED IN THE FIRST AND IN THE FINAL YEAR OF COURSE, 1968

							Australia		
	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Males*	*Females*	*Persons*
Enrolled in first year of course—									
For primary teaching .	1,189	1,957	1,085	675	553	140	1,228	4,371	5,599
For secondary teaching .	3,093	1,893	564	637	319	18	2,738	3,786	6,524
Courses not specified as primary or secondary teaching . . .	..	..	..	..	..	201	96	105	201
Total . . .	*4,282*	*3,850*	*1,649*	*1,312*	*872*	*359*	*4,062*	*8,262*	*12,324*
Enrolled in final year of course—									
For primary teaching .	1,248	1,735	861	656	439	168	1,190	3,917	5,107
For secondary teaching .	1,472	1,049	439	461	245	14	1,481	2,199	3,680
Courses not specified as primary or secondary teaching . . .	..	..	..	..	..	329	144	185	329
Total . . .	*2,720*	*2,784*	*1,300*	*1,117*	*684*	*511*	*2,815*	*6,301*	*9,116*

In-service training. As almost all teachers now enter the profession by way of teachers colleges or universities, where they receive basic professional training, in-service training in Australia is directed chiefly towards keeping teachers abreast of developments and adding to their basic training. In-service training usually takes the form of short courses held sometimes during vacations, sometimes during school-time or in the evening. In some States in-service courses for teachers in remote areas are provided by correspondence. Courses consist of discussions and lectures given by senior staff members of education departments and university and teachers college lecturers on such subjects as classroom techniques and supervision, librarianship, visual aids, music, arts and crafts, and physical education. In some States there are also in-service courses for special groups of teachers such as headmasters or teachers in one-teacher schools. In addition, district inspectors are responsible for organising short conferences of teachers, where professional topics are discussed. Education departments encourage teachers to pursue university courses and in some States pay the cost of courses undertaken by selected teachers.

In January 1969 groups of Australian teachers again attended refresher courses in New Caledonia for Australian and New Zealand teachers of French. These courses have been offered to the Australian Government by the French Government. Official publications of the education departments contain articles dealing with educational theory and practice. Magazines of the teachers' organisations, which reach the majority of government teachers, also contain articles of this type.

Status of teachers. Most teachers in government schools are permanent public servants and have security of tenure, superannuation rights, and the right of appeal in matters of promotion. The centralised education systems and the general policy of providing fully trained teachers for both city and country areas mean that teachers are subject to transfer to any part of the State in which they serve. It is common for a teacher's first appointment to be to a country school.

In each State there are unions of State school teachers and these together form a federal body, the Australian Teachers' Federation. Teachers in non-government schools have formed similar organisations. Their aim is to advance the teachers' status and conditions and to stimulate community interest in education problems.

Training of technical teachers

Prior to the 1939–45 War technical colleges were staffed chiefly by trained teachers in the employment of the education departments or technicians drawn from industry. Although some of the latter were highly qualified, the great majority had not been trained as teachers.

To preserve links with industry and trade practice, schemes have been developed which continue the recruitment of specialist tradesmen as teachers but provide also for their training in educational method and teaching techniques. In Victoria, the Technical Teachers College provides training for students with appropriate diploma or trade qualifications and suitable industrial experience. In New South Wales technical college lecturers and tradesmen-teachers receive an in-service course of teacher training in general education theory and teaching method, while correspondence courses and visiting lecturers assist the newly appointed tradesman-teacher in country colleges. Variations of this scheme are in operation in other States. Many technical teachers, principally of academic, commercial and domestic science subjects, hold trained teachers' certificates from teachers colleges.

Training of non-government school teachers

Teachers for non-government schools receive their training in a number of ways. The Roman Catholic Church staffs both its primary and secondary schools largely with members of religious orders. In recent years there has been an increase in the number of lay teachers being employed in Catholic schools, and training of students to become lay primary teachers has been instituted. Secondary teachers receive their academic training mostly through courses provided by Australian universities.

Other non-government schools tend to recruit their staffs from teachers who have already obtained qualifications in Australia or overseas. In New South Wales and Victoria, non-government school authorities offer courses designed specially for teachers in their schools. Non-government schools also recruit university graduates, who are then given professional guidance by senior members of the school staff. Private students may enrol at government teachers colleges on payment of a fee, but the number of places available is limited. Some teachers destined for non-government schools train in this way.

The following table shows, for non-government teachers colleges, the number of students enrolled, and the number in the final year of their courses.

NON-GOVERNMENT TEACHERS COLLEGES: ENROLMENTS(*a*), AUSTRALIA, 1968

	Enrolments			*Students in final year of course*		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*
For primary teaching . . .	267	851	1,118	86	351	437
For secondary teaching . . .	174	121	295	32	29	61
Total	*441*	*972*	*1,413*	*118*	*380*	*498*

(*a*) These figures include students taking university degree courses whether instruction is given at the university or the college. They exclude students at kindergarten teachers colleges.

During vacations many non-government teachers attend in-service training courses organised by education departments. In recent years vacation courses have been provided by bodies other than education departments for teachers from both government and non-government schools. For example, an independent body, the Science Foundation for Physics within the University of Sydney, has provided such courses for teachers of science in secondary schools in New South Wales.

Kindergarten teachers colleges

The kindergarten unions, which are non-government organisations, have established colleges providing three-year courses in all States except Tasmania, where an infant and pre-school course is provided by the Hobart Teachers College. The minimum entrance age is usually seventeen years and applicants with matriculation status are preferred. In New South Wales, the Sydney Day Nursery and Nursery Schools Association maintains a training college which provides a course for pre-school and kindergarten teachers. These colleges provide full-time diploma courses which are similar in content and standards. Teachers are trained for work with children between the ages of two and seven years. The training programme consists of a number of general education subjects (including music, literature, art, mathematics, and science), some professional education subjects (such as the principles of educational theory and the psychology of growth and development), and subjects forming the basis for pre-school programmes. Teaching practice forms an integral part of the course. The Melbourne Kindergarten Teachers College offers a one year full-time post-diploma course of advanced studies for teachers holding recognised qualifications and having a minimum of four years teaching experience.

The following table shows, for kindergarten teachers colleges, the number of students enrolled, and the number in the final year of their courses.

KINDERGARTEN TEACHERS COLLEGES
ENROLMENTS, AUSTRALIA, 1968

	Enrolments Females(*a*)	*Students in final year of course Females*(*a*)
Diploma course . . .	758	228
One year professional course(*b*) .	2	. .
Post-diploma course(*c*) . .	6	. .
Total	*766*	*228*

(*a*) There are no male students enrolled in kindergarten teachers colleges.
(*b*) For overseas students. (*c*) One year full-time course for qualified kindergarten teachers.

Government expenditure on schools and technical education

The following tables show particulars of the total net expenditure (i.e. gross expenditure less receipts for services rendered) from certain funds on government schools, education departments and technical education (including colleges of advanced education). The data have been compiled on the same basis as far as differences in organisation and accounting methods between States and Territories will permit. The tables include only expenditure from the consolidated revenue funds and certain trust or special funds. They exclude loan fund expenditure; expenditure on debt charges, pay-roll tax and superannuation payments, in so far as it is possible to identify these items; and some items for which information cannot be obtained from the public accounts of all States. In particular, the following tables exclude specific purpose expenditure by the Commonwealth for schools and technical colleges in the States, such as science laboratory grants, and Commonwealth (Advanced Education) grants.

Government schools' and education departments' expenditure

The figures relate throughout to years ended 30 June. Net expenditure per pupil relates the total net expenditure to the mean of the numbers of pupils enrolled at government schools at two consecutive school censuses. Net expenditure per head of population relates the total net expenditure to the mean population.

GOVERNMENT SCHOOLS AND EDUCATION DEPARTMENTS: NET EXPENDITURE STATES AND TERRITORIES, 1963-64 TO 1967-68

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.(a)*	*A.C.T.*	*Aust.*
TOTAL NET EXPENDITURE ($'000)									
1963–64	119,778	84,756	37,246	33,363	23,894	12,966	1,087	2,498	315,588
1964–65	140,803	91,593	40,011	36,380	26,810	14,413	1,352	3,264	354,626
1965–66	148,835	101,617	43,008	40,408	30,751	15,476	1,634	3,563	385,292
1966–67	165,495	111,640	48,309	45,674	33,237	17,340	1,855	4,043	427,593
1967–68	180,504	127,337	56,677	49,412	38,855	18,997	2,009	4,801	478,592
TOTAL NET EXPENDITURE PER PUPIL(*b*) ($)									
1963–64	190.18	194.07	145.81	175.24	176.11	184.86	182.14	192.06	181.67
1964–65	218.83	203.37	153.87	183.16	192.51	202.63	202.33	226.13	198.78
1965–66	224.50	218.11	161.54	195.65	213.67	214.83	214.30	223.83	209.27
1966–67	241.16	231.79	175.80	213.70	220.21	236.36	211.93	230.44	224.22
1967–68	253.20	257.03	200.70	225.08	245.61	252.66	205.65	246.00	242.58
TOTAL NET EXPENDITURE PER HEAD OF POPULATION(*b*) ($)									
1963–64	29.37	27.58	23.35	32.60	29.91	35.74	21.74	32.44	28.54
1964–65	33.99	29.20	24.59	34.58	32.81	39.34	25.61	38.67	31.44
1965–66	35.36	31.81	25.91	37.35	36.73	41.87	29.49	38.48	33.50
1966–67	38.73	34.35	28.62	41.37	38.55	46.37	31.93	40.47	36.52
1967–68	41.52	38.56	32.99	44.19	43.52	50.08	32.99	44.37	40.13

(*a*) Figures for 1963–64 to 1966–67 include expenditure on adult education which amounted to $916 in 1963–64, $1,092 in 1964–65, $887 in 1965–66, and $2,372 in 1966–67. (*b*) Expenditure figures exclude expenditure on special education of Aboriginal children, while pupil and population figures include Aborigines.

The following table shows, for the six States, the net expenditure on government schools and education departments classified into the following headings: primary education, secondary education, administration, transportation of school children and students, and training of teachers. Expenditure on technical and agricultural education is excluded from the tables. It has been necessary to estimate some items of expenditure, largely because the meanings of 'primary' and 'secondary' differ between States and because elementary and higher educations are sometimes given in the same school by the same teachers. Expenditure on government schools in the Northern Territory and Australian Capital Territory is not included in the following table because the detail is not available.

GOVERNMENT SCHOOLS AND EDUCATION DEPARTMENTS: CLASSIFICATION OF EXPENDITURE, STATES, 1963-64 TO 1967-68

($'000)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total(a)*
PRIMARY EDUCATION							
1963–64 . .	60,824	42,590	21,066	15,586	12,258	4,990	157,314
1964–65 . .	70,199	45,492	20,995	16,640	13,800	5,521	172,647
1965–66 . .	70,612	49,930	22,050	18,136	15,714	5,868	182,310
1966–67 . .	75,819	52,495	24,392	20,462	16,821	6,731	196,720
1967–68 . .	80,902	58,881	28,142	21,739	19,792	7,169	216,625
SECONDARY EDUCATION							
1963–64 . .	40,706	23,852	10,458	12,699	6,686	5,034	99,435
1964–65 . .	49,992	26,027	12,778	14,193	7,522	5,678	116,190
1965–66 . .	54,337	29,463	13,809	15,915	9,247	6,080	128,851
1966–67 . .	62,454	34,452	16,076	18,092	9,864	6,633	147,571
1967–68 . .	70,053	40,848	19,460	20,006	11,984	7,474	169,826
ADMINISTRATION							
1963–64 . .	4,522	1,906	1,484	698	858	810	10,278
1964–65 . .	5,503	2,232	1,571	813	1,021	833	11,973
1965–66 . .	6,237	2,357	1,794	848	909	904	13,049
1966–67 . .	7,095	2,773	2,010	975	1,058	1,048	14,958
1967–68 . .	7,471	2,747	2,151	1,043	1,090	1,055	15,556
TRANSPORTATION OF SCHOOL CHILDREN AND STUDENTS							
1963–64 . .	5,582	5,600	2,076	1,270	2,362	1,336	18,226
1964–65 . .	5,867	6,009	2,474	1,312	2,611	1,418	19,691
1965–66 . .	7,342	6,414	2,770	1,424	2,673	1,500	22,123
1966–67 . .	9,074	6,940	2,995	1,582	3,044	1,574	25,209
1967–68 . .	10,703	7,637	3,443	1,678	3,156	1,684	28,300
EDUCATION OF TEACHERS							
1963–64 . .	8,144	10,808	2,162	3,110	1,730	796	26,750
1964–65 . .	9,242	11,833	2,193	3,422	1,856	963	29,509
1965–66 . .	10,307	13,453	2,585	4,085	2,208	1,124	33,762
1966–67 . .	11,054	14,980	2,836	4,563	2,450	1,354	37,237
1967–68 . .	11,375	17,225	3,482	4,946	2,833	1,614	41,474

(*a*) Excludes Northern Territory and Australian Capital Territory.

Technical education expenditure

The following table shows the net expenditure on technical education (including expenditure relating to colleges of advanced education) from the State consolidated revenue funds, together with expenditure in the Australian Capital Territory. The table excludes specific purpose Commonwealth grants to the States, i.e. it shows expenditure on technical education and colleges of advanced education by the States from their own resources. For Commonwealth payments, *see* page 527.

TECHNICAL EDUCATION: NET EXPENDITURE, STATES AND AUSTRALIAN CAPITAL TERRITORY, 1963-64 TO 1967-68
($'000)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*A.C.T.*	*Aust.*
1963–64 . . .	10,684	18,048	2,044	1,330	2,772	732	211	35,821
1964–65 . . .	12,637	19,963	1,892	1,386	3,426	813	305	40,422
1965–66 . . .	13,137	22,864	2,677	1,216	4,240	946	445	45,525
1966–67 . . .	14,465	25,597	3,175	1,046	4,851	988	585	50,707
1967–68 . . .	15,918	29,829	3,969	1,095	5,496	1,225	720	58,252

Non-government schools finance

Most Roman Catholic parish schools charge fees, but payment is not insisted on in the case of families who cannot afford it. At the majority of non-government secondary schools, privately endowed scholarships are available in varying numbers, and reductions in fees are normally made for children of clergy or for two or more members of one family attending the same school. With these exceptions, pupils of non-government schools must pay fees.

Certain State scholarships and bursaries are tenable at approved non-government secondary schools. Since the establishment of educational systems by the State governments, official policy has been largely against the provision of direct financial assistance to non-government schools, but since 1967, all States have introduced some system of direct assistance to non-government schools, usually in the form of student allowances. Most States have also come to assist non-government schools in approved building projects. For details of Commonwealth finance for the building and equipping of science laboratories and school libraries, *see* pages 527-8.

Universities

Applicants for enrolment in Australian universities are required to have passed the matriculation examination in one of the States after five or six years of secondary education. Each university has its own regulations for matriculation, specifying the number and combination of subjects to be passed or the level of performance required. Students entering the universities have the choice of undergraduate study in various faculties. All universities provide also post-graduate courses of study. The Australian universities, with their faculties or schools, are listed below in the order of their foundation.

University of Sydney, 1850, Sydney, New South Wales: Agriculture, Architecture, Arts (including Education, Music and Social Studies), Dentistry, Economics, Engineering, Law, Medicine, Science, Veterinary Science.

University of Melbourne, 1853, Melbourne, Victoria: Agriculture, Applied Science, Architecture, Arts, Dental Science, Economics and Commerce, Education, Engineering, Law, Medicine, Music, Science, Veterinary Science.

University of Adelaide, 1874, Adelaide, South Australia: Agricultural Science, Architecture and Town Planning, Arts, Dentistry, Economics, Engineering, Law, Medicine, Music, Science, Technology and Applied Science.

University of Tasmania, 1890, Hobart, Tasmania: Agricultural Science, Arts, Commerce, Education, Engineering, Law, Medicine, Science.

University of Queensland, 1909, Brisbane, Queensland: Agriculture, Architecture, Arts, Commerce and Economics, Dentistry, Education, Engineering, Law, Medicine, Music, Science, Veterinary Science.

University of Western Australia, 1912, Perth, Western Australia: Agriculture, Architecture, Arts, Dental Science, Economics and Commerce, Education, Engineering, Law, Medicine, Science.

Australian National University, 1946, Canberra, Australian Capital Territory: Institute of Advanced Studies—John Curtin School of Medical Research, Research School of Biological Sciences, Research School of Chemistry, Research School of Physical Sciences, Research School of Social Sciences, Research School of Pacific Studies; School of General Studies (formerly Canberra University College, established in 1930)—Arts, Economics, Law, Oriental Studies, Science.

University of New England, 1954 (formerly New England University College, established in 1938), Armidale, New South Wales: Agricultural Economics, Arts, Economics, Rural Science, Science.

University of New South Wales, 1958 (formerly the New South Wales University of Technology, established in 1948), Sydney, New South Wales: Applied Science, Architecture, Arts, Biological Sciences, Commerce, Engineering, Medicine, Science.

Monash University, 1958, Melbourne, Victoria: Arts, Economics and Politics, Education, Engineering, Law, Medicine, Science.

University of Newcastle, 1965 (formerly Newcastle University College, established in 1951), Newcastle, New South Wales: Applied Science, Architecture, Arts, Economics and Commerce, Engineering, Science.

Flinders University of South Australia, 1966, Bedford Park, South Australia: Language and Literature, Social Sciences, Physical Sciences, Biological Sciences.

La Trobe University, 1967, Bundoora, Victoria: Agriculture, Biological Sciences, Humanities, Physical Sciences, Social Sciences.

Macquarie University, 1967, North Ryde, New South Wales: Behavioural Sciences, Biological Sciences, Chemistry, Earth Sciences, Economic and Financial Studies, Education, English Studies, Historical, Philosophical and Political Studies, Mathematics and Physics, Modern Languages.

Each of the universities was established by an Act of Parliament as an autonomous institution, with its own Governing Council or Senate. Nevertheless, the Australian universities receive substantial government support from both State and Commonwealth sources, only part of their income being derived from students fees, private donations and bequests.

There are also three university colleges. Townsville University College, founded in 1961, is a part of the University of Queensland. Degree courses in Arts, Economics, Commerce, Education, Science, and Civil Engineering are available. In addition, the first two years of courses in all branches of Engineering and of Applied Science may be taken and first year courses in Agriculture, Forestry, Dentistry, Medicine, Pharmacy, Veterinary Science, and Law are available. Wollongong University College was opened in 1962 and is part of the University of New South Wales. It offers courses in the faculties of Applied Science, Arts, Commerce, Engineering, Science, and Medicine. The W.S. and L.B. Robinson University College of Broken Hill, established in 1954, is part of the University of New South Wales. It offers courses in Engineering and Science.

Also, the University of New South Wales has responsibilities for university level education at the Royal Military College, Duntroon and the Royal Australian Naval College, Jervis Bay (A.C.T.).

Organisation of courses

Bachelor degree courses are from three to six years in length, depending on the faculty. Certain courses may be undertaken by part-time or evening students. The university academic year begins in March and finishes in early December. At most universities two short vacation periods divide the year into three terms, but there are four terms in some universities.

Several universities make provision for external tuition, whereby students living away from university towns may take a restricted number of courses by correspondence. The University of Queensland has developed a system of correspondence tuition which now caters not only for students within the State but also for those in the Northern Territory, in the Territory of Papua and New Guinea, and for Colombo Plan Scholarship holders in south-east Asia. External students living in Queensland receive tutorial assistance at university centres in the principal country towns.

The University of New England's Department of External Studies offers a wide range of subjects for external study, leading to the degrees of Bachelor of Arts, Bachelor of Letters, Bachelor of Education, the Diploma in Education, and the Diploma in Educational Administration. External students must attend short annual residential schools of instruction in their subjects, usually held at the university.

Macquarie University also conducts courses for external students who reside in New South Wales or the Australian Capital Territory. At present there is an emphasis on science programmes. It also requires attendance at short residential schools of instruction.

Post-graduate courses leading either to a Master degree or to a Doctorate are available at all universities. Facilities cover the humanities, social sciences and pure and applied sciences. Additional courses are constantly being introduced by the universities at both the undergraduate and the post-graduate level to cover new fields of knowledge and specialisation.

Research

A programme of research work and training in research techniques is carried out by the universities as part of their normal functions. Post-graduate students and members of university staff are engaged in research, both as part of their work for post-graduate degrees and also as part of group and departmental research programmes. Support for research in universities is derived from public and private sources, including funds and foundations established to encourage research in a particular field.

University expansion and development

Since the 1939–45 War the Australian universities have had to face increasing demands on their facilities, firstly from large numbers of ex-service personnel in the immediate post-war years and later from increasing numbers of students leaving secondary schools each year. By 1969 the total enrolments in Australian universities had reached approximately 101,000 compared with an early post-war peak of 32,453 in 1948.

To assist the universities to cope with these demands, increasing co-operation between the Commonwealth Government and the State governments in university finance became necessary. The Commonwealth Government set up a Committee on Australian Universities, whose 1957 report ('The Murray Report') led to more finance becoming available to universities and to the setting up of a permanent body, the Australian Universities Commission, to advise the Commonwealth Government on university development. In the years since the Murray Report the following major developments have taken place in the Australian university structure: the University of New South Wales was created from the earlier University of Technology in 1958; in the same year Monash University was established in Victoria; in 1960 the Australian National University was reconstituted, combining both undergraduate and post-graduate facilities, and now consists of the Institute of Advanced Studies and the School of General Studies created from the Canberra University College; the University of Queensland set up the University College of Townsville in 1961; the University of New South Wales established the Wollongong University College in 1962; in 1965 the University of Newcastle was created from the Newcastle University College; in 1966 the University of Adelaide at Bedford Park became The Flinders University of South Australia; and in 1967 Macquarie University and La Trobe University were established in New South Wales and Victoria respectively.

The Queensland Government is proceeding with plans for the construction of a third university institution at Mount Gravatt.

University teaching and research staff

UNIVERSITIES: TEACHING AND RESEARCH STAFF(*a*), 1968

	Full-time teaching and research staff							
University	*Professors*	*Associate professors and readers*	*Senior lecturers and lecturers*	*Assistant lecturers, demonstrators, etc.(b)*	*Total*	*Part-time teaching staff(c)*	*Full-time research only staff*	*Part-time research only staff(d)*
Australian National	36	29	159	49	273	62	794	. .
Sydney	96	96	539	246	977	1,416	374	10
New South Wales	85	80	493	213	871	759	140	7
New England	31	24	160	91	306	58	64	. .
Newcastle	21	9	116	8	154	153	8	1
Macquarie	19	6	71	28	124	97	12	. .
Melbourne	94	96	523	202	915	823	260	21
Monash	72	28	363	168	631	481	83	3
La Trobe	21	3	62	22	108	16	10	1
Queensland	77	83	495	273	928	770	162	2
Adelaide	65	58	320	69	512	689	266	8
Flinders	23	4	75	14	116	63	23	6
Western Australia	53	45	237	68	403	481	148	6
Tasmania	28	20	93	28	169	253	23	17
Total	**721**	**581**	**3,706**	**1,479**	**6,487**	**6,121**	**2,367**	**82**

(*a*) Filled positions. Teaching and research staff includes all staff with teaching functions, but excludes research only staff which is shown separately. (*b*) Includes tutors and teaching fellows. (*c*) Teaching hours in units of 100 hours per annum. (*d*) In equivalent full-time units of 35 hours per week.

UNIVERSITIES: TEACHING AND RESEARCH STAFF(*a*), AUSTRALIA, 1964 TO 1968

	Full-time teaching and research staff							
Year	*Professors*	*Associate professors and readers*	*Senior lecturers and lecturers*	*Assistant lecturers, demonstrators, etc.(b)*	*Total*	*Part-time teaching staff(c)*	*Full-time research only staff*	*Part-time research only staff(d)*
1964 . . .	463	409	2,847	1,004	4,723	4,325	1,675	45
1965 . . .	522	449	3,048	1,085	5,104	5,116	1,744	63
1966 . . .	615	487	3,297	1,261	5,660	5,615	2,057	82
1967 . . .	663	547	3,497	1,337	6,044	5,354	2,249	78
1968 . . .	721	581	3,706	1,479	6,487	6,121	2,367	82

(*a*) Filled positions. Teaching and research staff includes all staff with teaching functions, but excludes research only staff which is shown separately. (*b*) Includes tutors and teaching fellows. (*c*) Teaching hours in units of 100 hours per annum. (*d*) In equivalent full-time units of 35 hours per week.

University students enrolled

UNIVERSITIES: STUDENTS ENROLLED, 1968

	Degree courses		*Diploma courses*				
University	*Higher degree*	*Bachelor degree*	*Post-graduate*	*Sub-graduate*	*Certificate courses*	*Other courses (a)*	*Adjusted total(b)*
Australian National .	618	3,014	. .	. .	. .	276	3,877
Sydney	2,209	12,708	902	49	. .	385	15,908
New South Wales . .	1,630	11,472	603	88	323	590	14,688
New England . .	267	4,018	497	. .	1	97	4,853
Newcastle . . .	161	1,952	103	. .	. .	70	2,264
Macquarie . . .	211	1,745	. .	251	. .	91	2,047
Melbourne . . .	1,199	11,569	178	676	. .	843	13,992
Monash . . .	599	7,551	426	. .	. .	108	8,466
La Trobe . . .	63	1,044	. .	. .	. .	57	1,163
Queensland . . .	788	13,413	209	311	71	525	15,317
Adelaide . . .	733	7,155	232	477	16	125	8,591
Flinders . . .	88	1,089	17	. .	. .	18	1,212
Western Australia . .	516	5,546	245	. .	. .	278	6,567
Tasmania . . .	148	2,041	184	24	48	199	2,592
Total . . .	**9,230**	**84,317**	**3,596**	**1,876**	**459**	**3,662**	**101,537**

(*a*) Includes post-doctoral courses, 'master preliminary' courses and students enrolled in one or more subjects of a normal course without having been admitted to the course as a whole. (*b*) Adjustment made for students enrolled for more than one course.

Of the students enrolled in 1968, 72,470 were males and 29,067 females.

UNIVERSITIES: STUDENTS ENROLLED, AUSTRALIA, 1964 TO 1968

	Degree courses		*Diploma courses*				
Year	*Higher degree*	*Bachelor degree*	*Post-graduate*	*Sub-graduate*	*Certificate courses*	*Other courses (a)*	*Adjusted total(b)*
1964 . . .	4,944	62,936	1,984	3,377	650	3,195	76,188
1965 . . .	5,672	69,540	2,160	3,277	361	3,444	83,349
1966 . . .	6,995	76,453	2,472	2,625	267	3,556	91,291
1967 . . .	8,562	78,825	3,075	2,093	495	3,555	95,380
1968 . . .	9,230	84,317	3,596	1,876	459	3,662	101,537

(*a*) See footnote (*a*) above. Some enrolments for 'master preliminary' now included in 'other course' were included in 'higher degree' in previous Year Books. (*b*) Adjustment made for students enrolled for more than one course.

UNIVERSITY STUDENTS ENROLLED: COURSES

AUSTRALIA, 1964 TO 1968

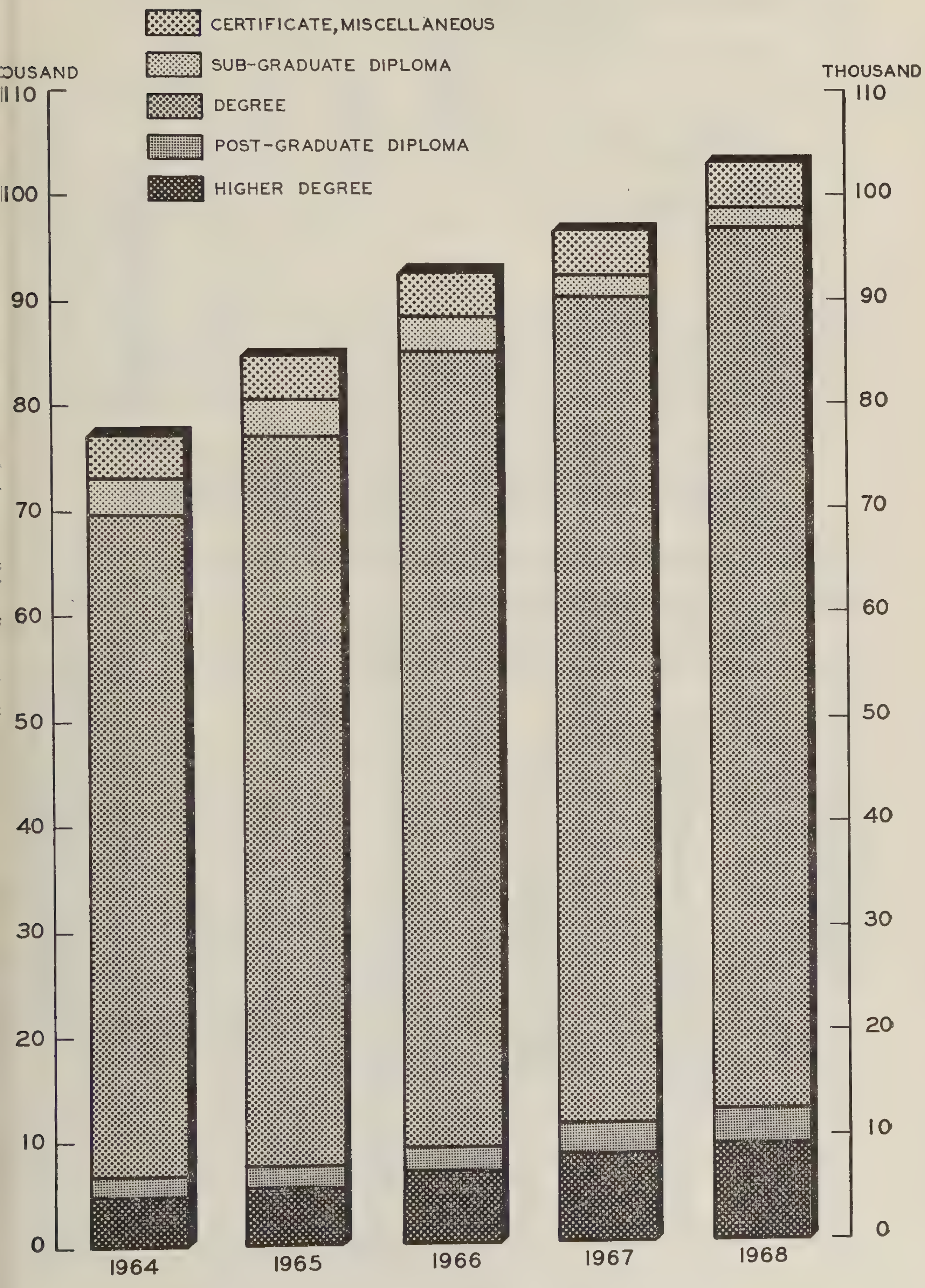


PLATE 34

University students commencing courses

UNIVERSITIES: STUDENTS COMMENCING HIGHER DOCTOR, PH D. MASTER AND BACHELOR DEGREE COURSES FOR THE FIRST TIME IN ANY AUSTRALIAN UNIVERSITY, 1968(*a*)

University	*Higher doctor degree courses*	*Ph.D. degree courses*	*Master degree courses*	*Bachelor degree courses*
Australian National	..	141	34	1,065
Sydney	1	108	600	3,150
New South Wales	4	121	460	3,910
New England	..	17	27	1,130
Newcastle	..	19	47	744
Macquarie	..	12	79	787
Melbourne(*b*)	n.a.	n.a.	n.a.	2,524
Monash	..	64	141	2,204
La Trobe	..	5	31	549
Queensland	15	89	113	3,062
Adelaide	10	70	61	1,499
Flinders	..	17	18	503
Western Australia	..	51	78	1,517
Tasmania	2	18	14	582
Total	**n.a.**	**n.a.**	**n.a.**	**23,226**

(*a*) These statistics, available from 1968, replace statistics of new students enrolled which were shown for 1967 and earlier years. Some universities have been unable to supply figures on this basis for 1968. (*b*) Students enrolling for the first time at that university.

Of students commencing courses in 1968, 17,337 were males and 8,356 were females.

Full-time and other university students by level of course

UNIVERSITIES: FULL-TIME, AND OTHER STUDENTS ENROLLED, BY LEVEL OF COURSE, 1968

	Higher degree courses			*Bachelor degree courses*		*Other courses and enrolments(b)*		*All students*		
University	*Full-time*	*Staff(a)*	*Part-time*	*Full-time*	*Other*	*Full-time*	*Other*	*Full-time*	*Other*	*Total*
Australian National	485	54	79	1,459	1,555	37	208	1,981	1,896	3,877
Sydney	638	280	1,276	10,606	1,930	747	431	11,991	3,917	15,908
New South Wales	553	330	747	7,208	4,263	544	1,043	8,305	6,383	14,688
New England	100	118	47	1,266	2,730	118	474	1,484	3,369	4,853
Newcastle	74	39	48	981	971	53	98	1,108	1,156	2,264
Macquarie	29	31	151	642	1,103	2	89	673	1,374	2,047
Melbourne	721	138	340	8,622	2,568	491	1,112	9,834	4,158	13,992
Monash	365	125	108	6,116	1,244	319	189	6,800	1,666	8,466
La Trobe	34	15	14	855	189	10	46	899	264	1,163
Queensland	263	284	241	6,745	6,668	305	811	7,313	8,004	15,317
Adelaide	377	114	242	4,768	2,336	294	460	5,439	3,152	8,591
Flinders	62	10	16	988	101	16	19	1,066	146	1,212
Western Australia	227	70	219	3,707	1,834	145	365	4,079	2,488	6,567
Tasmania	68	33	47	1,575	465	120	284	1,763	829	2,592
Total	**3,996**	**1,641**	**3,575**	**55,538**	**27,957**	**3,201**	**5,629**	**62,735**	**38,802**	**101,537**

(*a*) These are full-time university staff enrolled in higher degree courses. (*b*) Includes post-graduate diploma, sub-graduate diploma, certificate and other non-degree courses and enrolments.

UNIVERSITIES: FULL-TIME, AND OTHER STUDENTS ENROLLED, BY LEVEL OF COURSE AUSTRALIA, 1964 TO 1968

Year	*Higher degree courses*			*Bachelor degree courses*		*Other courses and enrolments(b)*		*All students(c)*		
	Full-time	*Staff(a)*	*Other*	*Full-time*	*Other*	*Full-time*	*Other*	*Full-time*	*Other*	*Total*
1964	2,342	n.a.	2,602	39,883	23,053	3,018	6,286	44,500	31,688	76,188
1965	2,658	n.a.	3,014	44,942	24,598	3,521	5,891	50,202	33,147	83,349
1966	3,354	n.a.	3,641	50,500	25,953	3,540	5,633	56,279	35,012	91,291
1967	4,088	n.a.	4,474	51,841	26,984	3,347	5,887	58,325	37,055	95,380
1968	4,004	1,645	3,581	56,271	28,046	3,819	5,774	62,735	38,802	101,537

(*a*) These are full-time university staff enrolled in higher degree courses. (*b*) Includes post-graduate diploma, sub-graduate diploma, certificate and other non-degree courses and enrolments. (*c*) Adjusted for students enrolled for more than one course.

Assistance to university students

The Commonwealth Government, through the Commonwealth Scholarships Board, grants undergraduate and post-graduate scholarships to university students. (Details of the Commonwealth Scholarship Scheme are given on page 525.) Commonwealth, State and local governments also award cadetships and other assistance to their employees. Foreign students are assisted by the Commonwealth Government under arrangements such as the Colombo Plan. The universities themselves grant exhibitions and scholarships as well as special assistance to teachers, etc.

UNIVERSITIES: ASSISTED STUDENTS, 1968

University	*Source of assistance*					*Type of course*	
	Commonwealth Government	*State Governments*	*Universities*	*Other*	*Adjusted total(a)*	*Higher degree*	*Other*
Australian National	887	330	551	64	1,791	536	1,255
Sydney	5,762	2,708	3,846	93	9,327	705	8,622
New South Wales	2,955	528	2,995	444	6,449	784	5,665
New England	427	129	2,204	42	2,762	189	2,573
Newcastle	392	569	815	189	1,403	112	1,291
Macquarie	260	245	671	19	964	54	910
Melbourne	5,578	2,351	3,139	173	9,380	508	8,872
Monash	3,070	1,773	2,715	46	5,951	485	5,466
La Trobe	213	389	507	5	726	44	682
Queensland	4,175	943	710	164	5,992	564	5,428
Adelaide	2,587	1,834	1,307	158	5,733	531	5,202
Flinders	370	520	44	8	924	83	841
Western Australia	1,912	1,659	810	172	4,550	296	4,254
Tasmania	766	611	121	82	1,489	103	1,386
Total	**29,354**	**14,589**	**20,435**	**1,659**	**57,441**	**4,994**	**52,447**

(*a*) Adjustment made for students assisted from more than one source.

UNIVERSITIES: ASSISTED STUDENTS, AUSTRALIA, 1964 TO 1968

Year	*Source of assistance*					*Type of course*	
	Commonwealth Government	*State Governments*	*Universities*	*Other*	*Adjusted total(a)*	*Higher degree*	*Other*
1964	19,361	11,674	13,765	1,771	39,416	2,913	36,503
1965	21,233	13,660	14,875	1,904	44,078	3,218	40,860
1966	24,611	14,793	15,298	2,161	48,800	3,938	44,862
1967	27,320	15,499	16,204	1,813	53,466	4,738	48,728
1968	29,354	14,589	20,435	1,659	57,441	4,994	52,447

(*a*) Adjustment made for students assisted from more than one source. No adjustment has been made for students who received assistance for a higher degree course and another course.

Resident university students

The following table shows the numbers of students classified according to the place in which they lived during term.

UNIVERSITIES: TERM RESIDENCE OF STUDENTS, 1968

University	*Halls of residence*	*Residential colleges*	*At home*	*Elsewhere*	*Total*
Australian National	736	189	1,845	1,107	3,877
Sydney	233	999	(*a*)11,493	(*a*)3,183	15,908
New South Wales	574	..	11,697	2,417	14,688
New England	1,193	..	3,469	191	4,853
Newcastle	..	..	1,775	489	2,264
Macquarie	..	..	1,715	332	2,047
Melbourne	167	(*a*)1,958	(*a*)9,036	(*a*)2,831	13,992
Monash	539	..	6,573	1,354	8,466
La Trobe	232	..	769	162	1,163
Queensland	131	1,359	11,434	2,393	15,317
Adelaide	..	400	6,798	1,393	8,591
Flinders	..	33	925	254	1,212
Western Australia	156	543	4,845	1,023	6,567
Tasmania	125	261	1,438	768	2,592
Total	**4,086**	**5,742**	**73,812**	**17,897**	**101,537**

(*a*) Estimated.

University degrees conferred, etc.

UNIVERSITIES: DEGREES CONFERRED, AND DIPLOMAS AND CERTIFICATES GRANTED YEAR ENDED 30 JUNE 1968

	Degrees				*Diplomas*		
University(*a*)	*Higher doctor*	*Ph.D.*	*Master*	*Bachelor*	*Post-graduate*	*Sub-graduate*	*Certificates*
Australian National	2	93	41	397	..	..	..
Sydney	4	70	236	2,557	629	31	..
New South Wales	..	48	129	1,365	245	15	244
New England	..	23	18	480	158	..	..
Newcastle	..	5	10	264	82	..	..
Melbourne	12	67	157	1,993	168	149	..
Monash	..	26	12	887	251	..	..
Queensland	2	32 (7)	56 (4)	1,568 (1)	144	110	190 (24)
Adelaide	10	79	42	1,093 (8)	88	241	..
Flinders	..	1	4	10	4	..	..
Western Australia	2	32 (3)	33	638	113	..	..
Tasmania	..	12	6	329	57	11	37
Total	**32**	**488 (10)**	**744 (4)**	**11,581 (9)**	**1,939**	**557**	**471 (24)**

(*a*) No awards have yet been made at Macquarie and La Trobe Universities. Figures shown in brackets refer to number included in both 1967 and 1968 details.

UNIVERSITIES: DEGREES CONFERRED, AND DIPLOMAS AND CERTIFICATES GRANTED 1964 TO 1968(*a*)

Year	Degrees				Diplomas		
	Higher doctor	*Ph.D.*	*Master*	*Bachelor*	*Post-graduate*	*Sub-graduate*	*Certificates*
1964	34	203	387	7,037	888	443	427
1965	37	276	475	7,839	1,050	498	332
1966	47	336	565	9,019	1,304	499	331
1967	40	327	635	10,393	1,454	445	570
1968	32	488 (10)	744 (4)	11,581 (9)	1,939	557	471 (24)

(*a*) Figures for the years 1964 to 1967 refer to the year ended 31 July; those for 1968 refer to the year ended 30 June. Figures included in both 1967 and 1968 are shown in brackets against 1968 figures.

University finance

Australian universities are incorporated by statute. Since their establishment they have come to depend greatly on government grants for their income. In recent years large amounts have been required for new buildings, as well as for current expenditure to provide staff and equipment to cope with increased student enrolments. In 1967 income from other than State and Commonwealth grants, including student fees, amounted to just over one-fifth of the total income. Income from non-government sources includes grants, mainly for research purposes, from businesses, international foundations, and private individuals. Some income is also received from endowments.

Financial assistance to universities from the Commonwealth Government

Prior to 1939 Commonwealth assistance was almost entirely concerned with research projects carried out by or in collaboration with the universities. During and since the 1939–45 War the Commonwealth extended assistance to university students, at first to increase the number of highly trained people required for the war effort, then with the object of rehabilitating ex-servicemen, and finally as a social service benefit to the community. For the purpose of reconstruction training the Commonwealth Government made available to the universities approximately $2 million for buildings and $1 million for equipment.

Following a report submitted by a committee of inquiry appointed to report on university finances and requirements, the Commonwealth, since 1951, has made grants to the States for recurrent expenditure on university purposes and for university halls of residence and affiliated residential colleges. Since 1958 the Commonwealth has also assisted with the capital needs of the universities for building projects and for equipment, and grants for the building programmes of residential colleges affiliated with universities, including university halls of residence. In the 1961–63 triennium the Commonwealth gave grants for buildings at teaching hospitals and in 1960 instituted grants for research at universities. As well as making grants available for State universities, the Commonwealth has continued to support the university institutions for which it is responsible.

In 1959, following the Report of the Committee on Australian Universities, the Commonwealth Government established the Australian Universities Commission under the *Australian Universities Commission Act* 1949. The principal function of the Commission is to advise the Minister for Education and Science on financial assistance for the maintenance and development of Australian universities. The Commission commenced its work in July 1959. The first report of the Commission presented in October 1960 and covering the years 1961 to 1963, recommended Commonwealth grants totalling $86 million for State universities. The Comission later recommended a Commonwealth grant of $4 million for teaching hospitals. *The States Grants* (*Universities*) *Act* 1960–1964 gave effect to the financial recommendations contained in the Commission's first report and subsequent recommendations for 1961–63. The Commission's second report was presented in August 1963, and recommended Commonwealth grants totalling more than $121 million for State universities, subsequently increased by $3.4 million for teaching hospitals, for the period 1964 to 1966. The *Universities* (*Financial Assistance*) *Act* 1963–1966 gave effect to the financial recommendations contained in the Commission's second report and subsequent recommendations for 1964–66. In August 1966 the third report was presented. It recommended Commonwealth grants to the State universities of almost $200 million for the period 1967–69, including almost $6 million for teaching hospitals. The Commonwealth Government grant, including $5.7 million for teaching hospitals, was fixed following discussion with State governments, at $181 million (including its share of the cost of increases in academic salaries as from 1 July 1967). The Act giving effect to these grants is the *Universities* (*Financial Assistance*) *Act* 1966–67.

Commonwealth grants for recurrent expenditure in universities. This is a continuation of grants provided since 1951. The maximum amounts available in 1964 to 1969 are shown in the following table.

STATE UNIVERSITIES, ETC.: COMMONWEALTH GRANTS FOR RECURRENT EXPENDITURE, 1964 TO 1969
($'000)

University, etc.	*1964*	*1965*	*1966*	*1967*	*1968*	*1969*
Sydney	4,640	5,154	5,676	6,139	6,699	7,043
New South Wales(*a*)	4,450	4,352	4,832	5,247	5,748	6,186
New England	1,364	1,454	1,550	1,678	1,824	1,920
Newcastle	..	618	704	809	938	1,028
Macquarie	..	112	224	646	1,008	1,458
Melbourne	3,868	4,298	4,796	5,265	5,763	6,032
Monash	2,072	2,770	3,358	3,995	4,580	4,982
La Trobe	..	106	218	554	924	1,275
Queensland	2,808	3,238	3,644	4,153	4,696	5,068
Townsville	160	192	278	378	489	608
Adelaide	2,470	2,648	2,828	3,051	3,305	3,393
Flinders	112	208	418	732	882	1,010
Western Australia	1,794	1,974	2,166	2,398	2,668	2,857
Tasmania	744	844	942	1,073	1,214	1,324
South Australian Institute of Technology	230	258	290	(*b*)	(*b*)	(*b*)
Total	**24,712**	**28,226**	**31,924**	**36,118**	**40,738**	**44,184**

(*a*) Includes grants for the university colleges at Wollongong and Broken Hill and, for 1964, the University College of Newcastle which became the University of Newcastle as from 1 January 1965. (*b*) In 1967–69 Commonwealth grants were made through the Commonwealth Advisory Committee on Advanced Education.

Since 1961 grants have been made on a basis of $1 by the Commonwealth for every $1.85 of income received by a university from fees and State grants. From 1951 to 1960 the ratio was, in general, $1 to $3.

Commonwealth grants for teaching and administrative costs of halls of residence and residential colleges. From 1964 the grants consisted of Commonwealth payments each year of $5,000 (previously $4,000) to each college affiliated with or administered by a university, plus the sum of $30 for each resident student, and a further $10 for each non-resident student receiving tutorial assistance. The total Commonwealth grant paid in 1966 was $512,390. In the period 1967 to 1969 the basic grant for affiliated residential colleges was varied according to the size of the colleges. Colleges with fewer than 100 students continued to receive $5,000 per annum, while colleges enrolling 100, 120, 140, 160, and 180 students received extra grants in increments of $500 up to a maximum grant of $7,500 for a college of 180 or more students. For university halls of residence a Commonwealth grant of $5,000 per annum is payable without variation for the number of students.

Commonwealth grants for recurrent expenditure in university teaching hospitals. Since 1965 the Commonwealth Government has supported recurrent expenditure at teaching hospitals affiliated with universities. During 1966 the Commission held discussions concerning capital and recurrent grants for the 1967–69 triennium with the eight universities having medical schools. The Commonwealth Government support for recurrent grants in 1967 to 1969 relates to three items of expenditure. These are maintenance and service costs incurred on behalf of clinical students, administrative costs involved in clinical teaching, and books for students at libraries of teaching hospitals. The table below sets out the Commonwealth recurrent grants for teaching hospitals for 1965 and 1966 and those approved for each year of the 1967–69 triennium.

STATE UNIVERSITIES: MAXIMUM COMMONWEALTH GRANTS FOR RECURRENT EXPENDITURE AT TEACHING HOSPITALS, 1965 TO 1969

($)

University	*1965*	*1966*	*1967*	*1968*	*1969*
Sydney	38,600	74,000	100,141	102,646	105,979
New South Wales	7,800	19,000			
Melbourne	26,200	54,400	51,228	52,912	53,860
Monash	9,400	22,000	27,579	31,298	33,404
Queensland	15,200	31,600	37,544	39,509	40,141
Adelaide	13,600	27,600	20,505	20,315	20,315
Western Australia	9,600	19,400	18,758	19,305	19,557
Tasmania	..	1,400	4,211	4,617	6,196
Total	**120,400**	**249,400**	**259,966**	**270,602**	**279,452**

The basis of these grants is $1 from the Commonwealth for every $1.85 of income received by a university from fees and State grants for these purposes.

Commonwealth grants for building projects in universities. These grants, for the period 1967 to 1969, are shown in detail in the Second Schedule to the *Universities* (*Financial Assistance*) *Act* 1966–69. Payments are made up to a given maximum for each project, on the basis of $1 from the Commonwealth for every $1 of State grants. Since 1964 the grant, where appropriate, has included an allowance for furnishings and equipment. Previously, separate grants were provided for these items. Also, since 1964 the schedule showing grants for university building projects includes grants for university computing facilities, but grants for the erection and alteration of buildings for halls of residence administered by universities are shown elsewhere. The total Commonwealth grant for building projects for each university is shown in the following table.

STATE UNIVERSITIES: MAXIMUM COMMONWEALTH GRANTS FOR BUILDING PROJECTS, ETC., 1964 TO 1969

($'000)

University	*1964–66*	*1967–69*
Sydney	4,679	4,049
New South Wales	3,800	3,799
Wollongong	79	506
New England	1,353	1,300
Newcastle	1,020	1,800
Macquarie	2,100	3,905
Melbourne	4,813	4,080
Monash	4,470	4,830
La Trobe	1,410	5,838
Queensland	2,736	3,280
Townsville	380	1,768
Mount Gravatt	100	100
Adelaide	832	1,484
Flinders	2,835	2,161
Western Australia	1,921	2,000
Tasmania	936	1,008
Total	**33,464**	**41,908**

Commonwealth grants for buildings for halls of residence and affiliated residential colleges. The *States Grants* (*Universities*) *Act* 1963 shows the grant available to each university for both types of student residence in the Fourth Schedule. Previously, grants for buildings for university-administered halls of residence were included in the Schedule showing university building projects. Payments were made up to a given maximum for each project. For halls of residence the grant comprised $1 from the Commonwealth for every $1 of State grants. For affiliated residential colleges Commonwealth grants were up to half of the cost of a project, the other half being met from college or State government sources. For the 1964–66 triennium, however, payments were made up to a given maximum for each project on the basis of $1 from the Commonwealth for every $1 of residential college funds and State grants. This basis is to be continued for the 1967–69 triennium. The maximum Commonwealth grants available for each State university in this triennium are shown in the following table.

STATE UNIVERSITIES: MAXIMUM COMMONWEALTH GRANTS FOR BUILDINGS FOR HALLS OF RESIDENCE AND AFFILIATED RESIDENTIAL COLLEGES, 1964 TO 1969

($)

University	*1964–66*	*1967–69*
Sydney	773,250	528,000
New South Wales	687,000	1,026,000
New England	898,500	1,134,000
Melbourne	1,017,082	1,062,000
Monash	1,110,000	1,566,000
La Trobe	440,000	586,000
Queensland	647,259	926,000
Townsville	400,000	919,000
Adelaide	309,200	430,000
Flinders	35,000	. .
Western Australia	756,500	374,000
Tasmania	262,500	401,000
Total	**7,336,291**	**8,952,000**

Commonwealth grants for building projects in teaching hospitals. Since 1961 the Commonwealth Government has supported building grants recommended by the Commission for teaching hospitals. The total Commonwealth grants under this heading for 1961–63, 1964–66 and 1967–69 are shown in the following table. Payments are made on the basis of $1 from the Commonwealth for every $1 of income received by universities from fees and State grants for this purpose. Where appropriate the grants include an allowance for furnishings and equipment.

STATE UNIVERSITIES: MAXIMUM COMMONWEALTH GRANTS FOR BUILDING PROJECTS, ETC. AT TEACHING HOSPITALS, 1961 TO 1969

($)

University	*1961–63*	*1964–66*	*1967–69*
Sydney	746,370	582,700	900,000
New South Wales	588,920	179,500	
Melbourne	685,475	617,500	1,417,000
Monash	832,195	384,600	673,300
Queensland	565,310	525,150	269,300
Adelaide	216,510	640,400	92,500
Western Australia	65,106	63,350	795,000
Tasmania	. .	118,500	780,000
Total	**3,699,886**	**3,111,700**	**4,927,100**

Commonwealth grants for special research projects in universities. A Commonwealth grant of $1 million was made in the 1961–63 triennium for research equipment on the basis of $1 from the Commonwealth for every $1 of State grants. For the 1964–66 triennium the Australian Universities Commission recommended a Commonwealth grant for special research purposes of $5 million for the State universities on the basis of $1 from the Commonwealth for every $1 of State grants. Of this amount, a Commonwealth grant of $3 million was allocated by the Commission in agreement with State governments. The remaining $2 million was allocated by the Australian Research Grants Committee (*see* page 525) to individuals or research teams whether inside or outside universities. For the 1967–69 triennium the Commonwealth is providing $9 million for allocation by the Committee. Grants to universities for special research purposes are being made by the States.

University income and expenditure

The following tables show particulars of the income and expenditure of each university in 1967 and the totals for 1963 to 1967.

UNIVERSITIES: INCOME, 1967
($'000)

	Government grants(a)		*Other income*			
University	*Cwlth Government grants*	*State Government grants*	*Donations and endowments(b)*	*Student fees(c)*	*Other income*	*Total income*
INCOME FOR SPECIFIC CAPITAL PURPOSES(*d*)						
Australian National	5,784	..	9	..	141	5,934
Sydney	2,082	1,723	80	..	..	3,885
New South Wales	798	1,216	360	..	36	2,411
New England	608	511	111	..	96	1,326
Newcastle	212	450	66	..	..	728
Macquarie	1,628	1,453	..	..	2	3,083
Melbourne	2,397	863	194	..	44	3,500
Monash	1,195	1,195	139	..	..	2,530
La Trobe	933	2,223	..	..	..	3,157
Queensland	1,162	1,301	..	..	..	2,462
Adelaide	683	683	5	..	..	1,371
Flinders	928	923	..	..	1	1,853
Western Australia	476	436	..	..	..	912
Tasmania	360	360	..	..	..	719
Total	*19,246*	*13,336*	*964*	..	*321*	*33,868*
INCOME FOR OTHER PURPOSES						
Australian National	15,692	..	355	391	1,276	17,716
Sydney	7,942	8,235	2,813	3,520	943	23,454
New South Wales	6,449	7,531	681	2,475	918	18,052
New England	2,117	2,578	68	527	974	6,263
Newcastle	828	1,238	87	271	51	2,475
Macquarie	646	1,067	173	135	39	2,060
Melbourne	6,900	6,766	1,407	3,752	1,062	19,887
Monash	4,300	5,651	527	1,880	638	12,995
La Trobe	625	899	38	130	101	1,793
Queensland	5,429	6,035	1,982	2,915	625	16,985
Adelaide	4,391	4,761	552	1,207	709	11,619
Flinders	873	1,285	41	108	22	2,329
Western Australia	3,215	3,363	682	1,253	723	9,236
Tasmania	1,218	1,560	90	581	197	3,647
Total	*60,626*	*50,967*	*9,496*	*19,145*	*8,277*	*148,511*

For footnotes *see* next page.

UNIVERSITIES: INCOME, 1967—*continued*
($'000)

University	*Government grants(a)*		*Other income*			
	Cwlth Government grants	*State Government grants*	*Donations and endowments(b)*	*Student fees(c)*	*Other income*	*Total income*
			TOTAL INCOME			
Australian National	21,476	..	364	391	1,418	23,650
Sydney	10,024	9,958	2,893	3,520	942	27,338
New South Wales	7,247	8,747	1,041	2,475	954	20,463
New England	2,725	3,088	179	527	1,070	7,589
Newcastle	1,040	1,688	153	271	51	3,203
Macquarie	2,274	2,519	173	135	41	5,143
Melbourne	9,297	7,630	1,602	3,752	1,106	23,387
Monash	5,495	6,846	666	1,880	638	15,524
La Trobe	1,558	3,122	38	130	101	4,950
Queensland	6,591	7,335	1,982	2,915	625	19,447
Adelaide	5,074	5,444	557	1,207	709	12,990
Flinders	1,801	2,208	41	108	23	4,181
Western Australia	3,692	3,798	682	1,253	723	10,148
Tasmania	1,578	1,920	90	581	197	4,366
Total	**79,872**	**64,304**	**10,461**	**19,145**	**8,597**	**182,379**

(*a*) Includes funds expended by various government departments and other bodies in respect of universities but not controlled by the universities. (*b*) In the case of endowments, only income from property and other investment of these endowments is included. The treatment of donations depends on the terms of the gift, etc. When the capital sum is specified to be expended over several years, only the portion of the capital sum allocated to each year is shown as income in that year, but if the capital sum is available for spending without limitation as to time, the full amount is recorded as income in the year it is received, irrespective of whether it is spent in that year or not. The capital value of land and buildings donated to the universities is not recorded as income, unless these properties are sold, in which case the amounts realised are included. (*c*) Excludes fees collected on behalf of student unions, adult education fees, ad hoc course fees and public examination fees. (*d*) Income received specifically for new buildings, major alterations and additions to buildings, installation of services, purchase of land and buildings and major equipment.

UNIVERSITIES: INCOME, 1963-1967
($'000)

Year	*Government grants(a)*		*Other income*			
	Cwlth Government grants	*State Government grants*	*Donations and endowments(b)*	*Student fees(c)*	*Other income*	*Total income*
1963	45,269	39,162	8,440	10,260	4,372	107,504
1964	54,203	46,449	8,569	11,833	5,598	126,652
1965	64,537	56,993	9,885	14,869	5,895	152,178
1966	71,012	65,509	10,781	16,653	7,053	171,008
1967	79,872	64,304	10,461	19,145	8,597	182,379

For footnotes *see* previous table.

UNIVERSITIES: EXPENDITURE, 1967
($'000)

University	*Teaching and research*	*Adminis- tration and general overhead*	*Libraries*	*Buildings, premises, grounds*	*Sundry auxiliary expendi- ture*	*Total expendi- ture*
Australian National . .	14,020	1,612	798	5,662	1,542	23,635
Sydney	16,823	2,014	1,201	7,295	988	28,321
New South Wales . . .	12,351	1,560	780	4,139	1,078	19,908
New England . . .	3,626	759	266	2,320	1,015	7,986
Newcastle	1,787	232	205	969	89	3,282
Macquarie	983	440	289	3,697	41	5,451
Melbourne	14,288	1,684	803	6,747	1,267	24,789
Monash	9,093	1,322	886	3,333	790	15,424
La Trobe	899	332	340	4,153	96	5,819
Queensland	13,017	1,173	820	3,350	522	18,881
Adelaide	8,842	789	574	1,866	587	12,659
Flinders	1,761	272	285	1,556	35	3,910
Western Australia . .	6,303	702	416	2,046	790	10,258
Tasmania	2,593	406	250	926	215	4,391
Total	**106,386**	**13,298**	**7,915**	**48,061**	**9,056**	**184,714**

UNIVERSITIES: EXPENDITURE, 1963-1967
($'000)

Year	*Teaching and research*	*Adminis- tration and general overhead*	*Libraries*	*Buildings, premises, grounds*	*Sundry auxiliary expenditure*	*Total expenditure*
1963 . .	56,502	6,818	3,903	33,269	4,667	105,160
1964 . .	69,886	7,870	4,664	33,929	5,508	121,857
1965 . .	83,256	10,159	5,830	43,976	6,526	149,747
1966 . .	93,410	11,915	6,857	42,498	7,779	162,459
1967 . .	106,386	13,298	7,915	48,061	9,056	184,714

Colleges of advanced education

The Committee on the Future of Tertiary Education in Australia recommended that interim capital grants be made by both the States and the Commonwealth to twelve specified institutions in five States during 1965–66 preliminary to an arrangement for the expansion and development of tertiary education outside the universities. This recommendation was accepted by all governments, and has led to development of such institutions in all States. The colleges of advanced education are receiving substantial governmental financial support during the 1967–69 triennium. Commonwealth grants are conditional on the States providing $1 for every $1 of Commonwealth money for capital purposes and $1.85 of State money and student fees combined for every $1 of Commonwealth money for recurrent purposes. The Commonwealth has also established the Commonwealth Advisory Committee on Advanced Education to advise it on the development of the colleges. It is envisaged that the colleges will provide training with a vocational emphasis, as distinct from the academic education provided by the universities. In some States, colleges of advanced education are being developed from existing technological institutions. In the Australian Capital Territory and Tasmania, separate colleges of advanced education are being established. The following table shows maximum Commonwealth grants for the 1967–69 triennium.

COLLEGES OF ADVANCED EDUCATION: MAXIMUM COMMONWEALTH GRANTS, TRIENNIUM 1967 TO 1969

($'000)

State	*Grants for capital purposes*	*Grants for recurrent purposes*	*Grants for library materials(a)*	*Total grants*
New South Wales	8,834	2,069	160	11,063
Victoria	7,912	8,981	180	17,073
Queensland	4,040	1,826	60	5,926
South Australia	2,971	1,809	50	4,830
Western Australia	3,743	2,577	40	6,360
Tasmania	1,300	554	10	1,864
Total	**28,800**	**17,816**	**500**	**47,116**

(a) A special unmatched grant for the improvement of library facilities in colleges.

The colleges to be supported with Commonwealth funds during the 1967–69 triennium are as follows.

New South Wales. New South Wales Institute of Technology, New South Wales State Conservatorium of Music, National Art School, Sydney Technical College (art course), New South Wales College of Nursing, New South Wales College of Occupational Therapy, School of Physiotherapy at the Royal Prince Alfred Hospital, Speech Therapy Training School at the Royal Alexandra Hospital for Children, and Hawkesbury Agricultural College.

Victoria. Bendigo Institute of Technology, Caulfield Institute of Technology, Footscray Institute of Technology, Gordon Institute of Technology, Preston Institute of Technology, Royal Melbourne Institute of Technology, Swinburne College of Technology, Yallourn Technical College School of Mines and Industries, Ballarat, Emily McPherson College of Domestic Economy, Victoria Institute of Colleges, College of Nursing, Australia, Occupational Therapy School of Victoria, Physiotherapy School of Victoria, Victorian School of Speech Therapy, Victorian College of Pharmacy, Dookie Agricultural College, Longerenong Agricultural College, Burney Horticultural College, and the Victorian School of Forestry, Creswick.

Queensland. Queensland Institute of Technology (Brisbane, Capricornia, and Darling Downs), Queensland Conservatorium of Music, and Queensland Agricultural College.

South Australia. South Australian Institute of Technology, and South Australian School of Art.

Western Australia. Western Australian Institute of Technology, School of Mines, Kalgoorlie, Royal Perth Hospital School of Occupational Therapy, and Royal Perth Hospital School of Physiotherapy.

Tasmania. Tasmanian College of Advanced Education (courses located at Hobart, Launceston, and Burnie Technical Colleges), Tasmanian Conservatorium of Music, Tasmanian School of Art, and Tasmanian School of Dental Nursing.

Australian Capital Territory. Canberra College of Advanced Education.

Agricultural and forestry education

There are seven State agricultural colleges—Hawkesbury and Wagga (New South Wales), Longerenong and Dookie (Victoria), Lawes (Queensland), Roseworthy (South Australia), and Muresk (Western Australia), offering a comprehensive course of two or three years leading to the award of a Diploma in Agriculture or in a specialised field such as animal husbandry, dairy manufactures or horticulture. The Burnley Horticultural College, Victoria, offers a three-year diploma course, Diploma courses are also offered by two independent institutions, the C. B. Alexander Presbyterian Agricultural College in New South Wales and the Marcus Oldham Farm Agricultural College in Victoria.

Most agricultural colleges are government institutions. The government institutions are administered by the State Departments of Agriculture in New South Wales, Victoria, South Australia, and Western Australia, and by the State Department of Education in Queensland. Their purpose is to teach the principles and practices of agriculture and its specialised branches to those intending to take up farming as a career and to those who propose to enter such occupations as agricultural field officer or technical officer in food processing industries.

The minimum entrance standard is usually the penultimate major secondary examination of the State concerned, except in Western Australia where it is the sub-leaving examination. As entry is competitive, there is a tendency for students to hold better than the minimum qualifications. All the colleges are fully residential and the minimum age at which students may enter them varies from fifteen to seventeen years, depending on the college and the type of course.

In addition to their formal courses of training, agricultural colleges offer short courses of three days to one month for farmers and teachers in country districts.

Training in forestry is provided by a Department of Forestry in the Faculty of Science within the Australian National University's School of General Studies. A four-year degree course is offered. At the Victorian School of Forestry, Creswick, a three year diploma course can be taken.

State expenditure on agricultural and forestry education from Consolidated Revenue and certain special funds is shown in the following table. The figures exclude expenditure on pay-roll tax and superannuation, expenditure out of Commonwealth grants to the States for this purpose, and expenditure on agricultural and forestry education in universities.

EXPENDITURE ON AGRICULTURAL AND FORESTRY EDUCATION: STATES, 1963-64 TO 1967-68

($'000)

State	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
New South Wales	954	974	1,025	1,504	1,587
Victoria	590	664	697	822	875
Queensland	618	641	655	799	964
South Australia	236	232	232	261	302
Western Australia	176	208	213	258	324
Tasmania	2	3	3	2	3
Total	**2,576**	**2,722**	**2,825**	**3,646**	**4,055**

Other education

Conservatoria of music, schools of art, etc.

There are conservatoria of music in five States. Those in Victoria and South Australia are attached to the Universities of Melbourne and Adelaide respectively. The New South Wales State Conservatorium, the Queensland State Conservatorium and the Tasmanian Conservatorium are controlled by the respective departments of education. All five conservatoria offer diploma courses for entry to which matriculation status is not required; at the universities of Sydney, Melbourne, Adelaide, and Western Australia degree courses are also available.

The Canberra School of Music, established in July 1965, is administered by the Department of Education and Science. A three-year full-time diploma course, consisting of both practical and theoretical studies, is available.

The South Australian School of Art, founded in 1861, is the oldest in the country. The South Australian School of Art, the National Art School in Sydney, the National Gallery Art School in Melbourne and the Tasmanian School of Art offer courses in painting, sculpture and design. Several of the larger technical institutes also offer courses in the plastic and industrial arts, ranging from pottery to print-making, stained glass production and television design.

The National Institute of Dramatic Art in Sydney and the Australian Ballet School in Melbourne offer diploma courses of one to four years' duration for students of the theatre.

Educational training in the defence services

Each of the three defence services maintains institutions for the training of officers. The Royal Australian Naval College, Jervis Bay, Australian Capital Territory, became an affiliated college of the University of New South Wales in 1968. Selected matriculated cadets complete first year degree studies in science or engineering at the College, and subsequent years of degree studies at the university. The Royal Military College, Duntroon, Australian Capital Territory, became a college of the University of New South Wales in 1968. The Royal Australian Air Force Academy, Point Cook, Victoria, has evolved from the Royal Australian Air Force College, which was established in 1948 as a tertiary training centre to provide a professional education for permanent officers of the Air Force.

It is affiliated with the University of Melbourne and has adopted that University's Bachelor of Science course. The Academy is also permitted to present students for higher degrees in science and the degree of Doctor of Philosophy. Students may also proceed to the University of Sydney to take a degree in aeronautical engineering. The Australian Staff College and the Royal Australian Air Force Staff College provide one year courses for officers. Educational training is also provided in the apprentice training schools conducted by each of the Defence Services, and in the Royal Australian Navy School for Junior Recruits. The Royal Australian Air Force School of Languages, Point Cook, Victoria, conducts courses in French and Asian languages. In 1968 there were 45 students enrolled, of whom 7 were Royal Australian Air Force personnel.

The following table shows the number of officers, officer cadets and other ranks enrolled in the training establishments mentioned above.

SERVICE ESTABLISHMENTS PROVIDING EDUCATIONAL TRAINING
AUSTRALIA, 1968

Establishment	*Enrolments*	*New entrants during year*	*Number completing course during year*
OFFICERS AND OFFICER CADETS (*a*)			
Staff Colleges—			
Australian Staff College . . .	70	70	70
Royal Australian Air Force Staff College	24	24	24
Officer cadets—			
Royal Australian Navy—			
Royal Naval College . . .	121	52	23
H.M.A.S. *Leeuwin*	2	2	. .
Royal Military College . . .	252	82	66
Royal Australian Air Force—			
R.A.A.F. Academy. . . .	86	32	10
R.A.A.F. Diploma Squadron . .	138	60	23
APPRENTICES AND OTHER RECRUITS (*b*)			
Royal Australian Navy—			
Naval artificer apprentices . . .	702	184	186
Junior recruits	630	630	605
Topmen scheme	22	22	20
Army Apprentice School . . .	305	n.a.	89
Royal Australian Air Force—			
School of Technical Training . .	333	173	157
School of Radio	93	51	36

(*a*) Includes 164 cadets enrolled for university courses, 2 enrolled at teachers college, and 138 enrolled at an institute of technology. (*b*) Includes 124 apprentices enrolled at a technical college or institute of technology, and 18 enrolled for university courses.

The Australian School of Pacific Administration

The Australian School of Pacific Administration, controlled by the Department of Territories, trains students in the various aspects of service and administration in Commonwealth Territories, including teaching. In 1968, the number of students training as teachers was 28 males and 17 females in primary teaching courses, and 64 males and 30 females in secondary teaching courses. Eight of these students were also enrolled for a university degree course.

Australian Administrative Staff College

Opened in 1957, the Australian Administrative Staff College is a private organisation working in close co-operation with government and other public bodies, the armed services, and the trade union movement. It was founded, and is owned, by a large group of leading Australian companies and has its permanent premises at Mount Eliza, near Melbourne. The College conducts residential courses for administrators to further the study of the problems which arise in managerial work.

Commonwealth activities in education

Fields of activity

Although education is primarily the responsibility of the States, the Commonwealth has instituted a number of measures of direct assistance to educational institutions and to students. It is responsible for public education in its own Territories and is engaged in educational activities incidental to its responsibilities in such areas as defence, external relations, immigration, and social services. Education in Commonwealth Territories is described in the chapter The Territories of Australia; various schools and colleges for the Defence Services are referred to on pages 523–4 and other activities which may be considered broadly as educational are referred to in the section on Broadcasting and Television in the chapter Transport, Communication and Travel.

Department of Education and Science

The Commonwealth Department of Education and Science was created in December 1966. The Department, which absorbed the former Education Division of the Prime Minister's Department including the Commonwealth Office of Education, and subsequently, in 1968, the Education Branch of the Department of the Interior, is concerned with direct grants for educational purposes, e.g. for universities, colleges of advanced education, school libraries, technical schools, and science buildings, as well as with grants for building teachers and pre-school teachers colleges. It is responsible for assistance to students for the various Commonwealth scholarship schemes, for the scheme of Queen Elizabeth II Fellowships, and for special scholarships offered by overseas countries for Australians. Among the Department's other responsibilities are matters in the field of international relations in education, including Unesco and Commonwealth Co-operation in Education, and liaison with State and other education bodies throughout Australia. The Department provides professional advice on education to other Commonwealth departments and authorities. It administers grants to such bodies as the Academy of Science, the Humanities Research Council, the Social Sciences Research Council and the Institute of Aboriginal Studies, and is responsible for grants for scientific research such as those recommended by the Australian Research Grants Committee. It administers educational services in the Australian Capital Territory.

The *Australian Universities Commission* and the *Commonwealth Advisory Committee on Advanced Education* are responsible to the Minister for Education and Science. The Minister is also responsible for the *Commonwealth Scientific and Industrial Research Organization*, the *National Standards Commission*, the *Australian National University*, the *Institute of Aboriginal Studies*, and the *College of Advanced Education* in Canberra. The Prime Minister's Department continues to be responsible for the National Library and for art, literature and other cultural activities in which the Commonwealth is interested.

Commonwealth Scholarships Board

This Board, under its former title of the Universities Commission, was established by the *Education Act* 1945. Prior to 1945 the Commission had functioned under wartime National Security Regulations. The Board consists of a chairman and three other members. The main responsibility of the Board at present is advising the Government on the policy and administration of Commonwealth university and advanced education scholarships and Commonwealth post-graduate awards.

Advisory bodies

The Commonwealth Government has established various advisory bodies whose fields of concern relate to matters of education. Already mentioned (page 515) is the Australian Universities Commission, which advises the Commonwealth Government on university development. The Commonwealth Advisory Committee on Advanced Education advises the Minister on the balanced development of tertiary education outside universities. Within financial limits nominated by the Minister, the Committee recommends grants to the States for colleges of advanced education and directs grants to any such colleges established by the Commonwealth. The Australian Research Grants Committee advises the Minister on the merit of applications for research grants from individuals and research teams, and suggests the allocation of funds. The Queen Elizabeth II Fellowships Committee advises the Minister on the merit of applicants for these fellowships, which are awarded for post-doctoral study in the physical and biological sciences, and advises generally on the administration of this scheme of fellowships.

Assistance to students

The Commonwealth Government provides financial assistance to students through five major scholarship schemes. A total of 24,150 new awards were made available in 1969 under these schemes.

The Commonwealth University Scholarship Scheme made provision for 9,500 scholarships in 1969. Of these 7,500 are open entrance scholarships which are allocated amongst the States in proportion to population and are awarded on the basis of results achieved in Australian matriculation examinations. A small quota of open entrance awards is set aside as Mature Age Scholarships for students who have reached the age of twenty-five years. The remaining 2,000 scholarships are Later Year Awards for students who have already completed one or more years of a university course. Scholarship holders have their fees paid and may receive a living allowance subject to a means test. The maximum rates of living allowances are $904.80 per annum in the case of scholars living away from their parents and $559 for scholars living with parents.

The Commonwealth Advanced Education Scholarship Scheme provides 1,500 scholarships each year for students taking approved courses of advanced education at institutions other than universities. Conditions for selection and benefits are similar to those for university scholarships.

Under the Commonwealth Post-graduate Awards Scheme 650 new awards were made available in 1969 for students taking courses leading to higher degrees at Australian universities. The awards are for full-time study and may be renewed annually up to a maximum period of four years. The awards carry a stipend of $2,350 per annum and certain other allowances.

Under the Commonwealth Secondary Scholarship Scheme students compete each year for 10,000 scholarships to assist them during the final two years at secondary school. Secondary scholarship benefits are free of means test and comprise a yearly living allowance of $200, a textbook and equipment allowance of $50 per annum and reimbursement of compulsory fees up to a maximum of $150 per annum.

In 1964 the Commonwealth Government also introduced the Commonwealth Technical Scholarship Scheme under which it makes available 2,500 new awards annually to assist students to take approved technical courses. Most of these courses are at certificate level in technical colleges. Full-time Technical Scholarship holders receive the same benefits as Commonwealth secondary scholars. The benefits paid each year to part-time technical scholars are an allowance of $100, free of means test, and reimbursement of compulsory fees up to a maximum of $100.

International relations

An extension has taken place in relations and exchanges with other countries in the field of education. A significant encouragement to this growth has been membership of Unesco, to which Australia has belonged since 1946, when the organisation was founded.

Twelve specialist Unesco committees in Australia are responsible for activities within the areas of education, natural sciences, social sciences, culture, and communication. A major activity of the committees is the organisation of Australian seminars to which visiting overseas specialists make contributions. Other activities include the dissemination within Australia of information on Unesco and its activities and participation in the international programmes of the organisation, including for example the International Hydrological Decade, and the Associated Schools Project, a world-wide Unesco project linking schools and other educational institutions. There are also a number of Australians filling positions overseas as Unesco specialists in various fields.

With the co-operation of educational institutions, State education departments and other bodies, the Commonwealth has accepted increasing commitments in schemes of international assistance and co-operation. The Colombo Plan Technical Co-operation Scheme, the United Nations Expanded Programme of Technical Assistance, the Australian International Awards Scheme, the Australian South Pacific Technical Assistance Programme, and the Special Commonwealth African Assistance Plan are some of the programmes through which the Commonwealth Government is providing training for overseas students in Australia and is sending Australian experts and equipment to many of the newly developing countries, especially in Asia and Africa. Australia is also actively sharing with other Commonwealth countries in the scheme of Commonwealth Co-operation in Education, which includes the Commonwealth Scholarship and Fellowship Plan. The numbers of sponsored overseas students are shown on page 530.

In 1964, by agreement between the United States and Australian Governments, the Australian-American Educational Foundation, financed jointly by the two Governments, was established to operate a scheme of educational exchanges between the United States and Australia. This new scheme has similar aims and purposes to the Fullbright Scheme which it replaces and which had operated wholly on American funds.

Support is given to Australian participation in many international governmental and non-governmental organisations. For example, Australian educationists have attended meetings of the International Bureau of Education which has recently become part of Unesco, and regular contributions are made to that Bureau's international surveys into various aspects of education. Provision is made for attendance at major overseas conferences, recent examples being the Commonwealth Conference on Mathematics in Schools and the International Conference on the Trends in the Teaching and Training of Engineers.

Grants for science laboratories in schools

During the period 1 July 1964 to 30 June 1968, $42,291,200 was provided by the Commonwealth Government for the building and equipping of science laboratories in government and non-government secondary schools. A further $37,721,400 has been provided for the three years from 1 July 1968. Non-government schools in the Australian Capital Territory and the Northern Territory will also receive cash grants for science facilities and for school libraries, in conjunction with the capital aid scheme under which the Commonwealth Government meets interest charges on loans and also repays, in equal annual instalments over a period of twenty years, capital borrowed for approved school building projects.

Grants for teacher training

The Commonwealth Government is providing, under the *States Grants (Teachers Colleges) Act* 1967, $24,000,000 for the provision of teacher training facilities in a three year period ending 30 June 1970. These grants do not require any matching expenditure by the States and will finance projects selected by the States. The apportionment among the States is as follows.

GRANTS FOR TEACHER TRAINING, 1967 TO 1970
($'000)

State	*Allocation*
New South Wales	7,500
Victoria	5,350
Queensland	3,750
South Australia	3,200
Western Australia	2,700
Tasmania	1,500
Total	**24,000**

In addition the Commonwealth Government has introduced a new programme to assist the training of pre-school teachers. Legislation enacted in December 1968, provides $2,500,000 for pre-school teacher training facilities in a three year period commencing in 1969, that is planned to double the existing capacity of training colleges in the States.

Grants for technical education

The present series of Commonwealth technical training grants will provide $70,000,000 to the States over the seven years 1964–65 to 1970–71. The technical training grants are designed to assist trade and technician training, outside the normal secondary school system and below the tertiary level, conducted in State institutions. Agricultural colleges are being assisted as well as technical colleges. The grants, which do not have to be matched by the States, are available at a rate of $10 million a year. They are apportioned between the States, on a population basis, as follows.

GRANTS FOR TECHNICAL EDUCATION
1964-65 TO 1970-71
($)

State	*Allocation*
New South Wales	26,103,000
Victoria	19,765,600
Queensland	10,162,200
South Australia	6,601,100
Western Australia	5,055,100
Tasmania	2,313,000
Total	**70,000,000**

Grants for library facilities in schools

In August 1968, the Commonwealth Government announced a programme for the provision of $27 million over three years for approved capital grants for the development of school libraries in government and non-government secondary schools in the States. Commonwealth grants will be available for the erection, alteration or extension of library buildings, and for the provision of furniture, equipment, basic reference books and materials. As with the science facilities scheme, it is proposed that two advisory bodies in each State, one for Roman Catholic schools and one for other non-government schools, will recommend on priorities. Expenditure on this programme during 1968–69 is estimated at $3 million.

Grants for other educational purposes

The Commonwealth gives assistance to various educational schemes and institutions. Grants are made each year by the Commonwealth to the Australian Pre-school Association for the development of kindergarten education, to the Commonwealth National Fitness Council, to the Australian Council for Educational Research, to the Department of Adult Education at the University of Sydney for the publication of the *Current Affairs Bulletin*, and to assist in the provision of training in occupational therapy, physiotherapy and nursing.

Migrant education

The Commonwealth Government post-war immigration policy has brought to Australia a large number of immigrants with little or no knowledge of English. To assist the assimilation of these newcomers into the Australian community, a system of migrant education has been developed to teach them English and to give them information about Australia. This service is provided free of charge to immigrants above school leaving age.

Before arriving in Australia settlers who do not speak English are given some instruction in English by shipboard education officers. Some may have attended classes in Europe organised by the Inter-governmental Committee for European Migration, with which the Australian Government co-operates. In Australia, evening classes are arranged by State education departments wherever nine or more migrants in country areas, or twelve or more migrants in city areas, wish to learn English. There is also available through State education departments a free correspondence course in English. In addition, English lessons are broadcast regularly by the Australian Broadcasting Commission. The Department of Education and Science provides technical advice on all aspects of migrant education and is responsible for the preparation of teaching materials, while responsibility for the overall supervision of the programme rests with the Department of Immigration, which also meets the costs.

In February 1969, 14,076 migrants were enrolled in classes, and 6,933 were enrolled in radio and correspondence courses. From the inception of the programme in 1947 until February 1969, 674,729 migrants have been enrolled for English tuition.

Technical training by government departments

Although most needs of departments for trained staff are met by apprenticeship schemes and other technical college courses and by the universities, some departments provide training which is not available elsewhere. The most important field for which such training is provided is the training of telephone, telegraph, radio, and television technicians by the Postmaster-General's Department.

Commonwealth expenditure on education

An analysis of Commonwealth expenditure is provided in the following table. Under the heading of 'direct expenditure on goods and services' current expenditure includes the cost of the Department of Education and Science, the Australian Universities Commission and other administrative expenditure, expenditure by the Australian National University, and the provision of education services in the Australian Capital Territory and the Northern Territory (including re-imbursements to States for educational services in these Territories, such amounts being excluded from State expenditure). This expenditure is net of receipts in the form of fees, etc. 'Capital' expenditure, i.e., Commonwealth gross fixed capital expenditure, relates mainly to expenditure on new buildings and equipment by the Australian National University and for schools, etc. in the Northern Territory and the Australian Capital Territory.

COMMONWEALTH GOVERNMENT EXPENDITURE ON EDUCATION, 1963–64 TO 1967–68
($'000)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Direct expenditure on goods and services—					
Department of Education and Science—					
Current	1,417	1,656	1,878	2,532	3,473
Capital	..	..	..	9	48
Australian Universities Commission—					
Current	122	159	155	195	197
Australian Capital Territory—					
Current	3,060	4,044	4,451	5,254	6,207
Capital	2,367	2,772	3,506	4,652	4,770
Northern Territory—					
Current	960	1,209	1,472	1,641	2,246
Capital	845	1,356	1,504	1,242	992
Other—					
Current	503	587	617	694	770
Capital	29	20	18	76	112
Total—					
Current	6,062	7,655	8,573	10,316	12,893
Capital	3,241	4,148	5,028	5,979	5,922
Total, direct expenditure, goods and services	*9,303*	*11,803*	*13,600*	*16,295*	*18,815*
Grants to Australian National University—					
Current	8,639	11,400	12,658	14,223	16,698
Capital	4,678	5,392	5,062	5,316	5,570
Total grants to A.N.U.	*13,317*	*16,792*	*17,720*	*19,539*	*22,268*
Grants to Canberra College of Advanced Education—					
Current	..	..	..	..	43
Capital	..	..	..	25	439
Total, grants to Canberra College of Advanced Education	..	..	..	*25*	*482*
Payments to the States(*a*)—					
Current	21,080	28,529	32,929	38,772	48,339
Capital	12,780	32,652	32,074	40,091	53,958
Total, payments to States	*33,859*	*61,180*	*65,003*	*78,864*	*102,297*
Cash benefits to persons—					
Commonwealth scholarship schemes—					
Post-graduate	834	1,236	1,733	2,432	2,899
University	6,897	7,903	10,064	13,890	13,383
Advanced education	..	..	198	660	754
Secondary	..	3,382	5,197	6,243	6,474
Technical	..	212	600	816	1,031
Soldiers' children education scheme	2,273	2,282	2,534	2,462	2,720
Other	433	573	812	816	852
Total, cash benefits to persons	*10,435*	*15,588*	*21,140*	*27,319*	*28,113*
Grants towards private capital expenditure—					
Australian Capital Territory	..	86	237	249	1,435
Northern Territory	..	28	5	7	..
Other	..	210	..	..	..
Total, grants towards private capital expenditure	..	*324*	*242*	*256*	*1,435*
Total	**66,915**	**105,687**	**117,703**	**142,299**	**173,411**

(*a*) Specifically for education.

The foregoing table is based on an analysis by major function of all Commonwealth expenditure. The figures exclude expenditure on certain items which are related to education, such as payments for the Australian Broadcasting Commission education series, Australian Agricultural Council scholarships and the education of Aborigines, which are classified to other functional headings. The amounts involved in the above-mentioned items were: 1963-64, $703,000; 1964-65, $775,000; 1965-66, $866,000; 1966-67, $1,100,000; 1967-68, $3,167,000.

Commonwealth figures shown in the table on page 532 differ from those shown in the above table because: education grants to the States by the Commonwealth (mainly for universities, science facilities in State schools, technical schools and, colleges of advanced education) are included here, while expenditure by the States from these education grants is included in the State education expenditure figures on page 532; grants by the Commonwealth Government to the Australian National University are shown here, while only the actual net expenditure by that university is included in Commonwealth direct expenditure on page 532.

Adult education

The term 'adult education' as used in Australia refers mainly to non-vocational educational and cultural activities for adults. While the nature of the recognised adult education authorities varies from State to State, their major activities have many common features. Regular courses of lectures are organised on such topics as literature, music, drama, international affairs, languages, and crafts. Some authorities also organise discussion groups, festivals and summer schools, and provide special services for groups in remote areas. In 1960 an Australian Association of Adult Education was formed, and its first annual conference was held in Adelaide in 1961. The Association handles matters pertaining to adult education at a national level and arranges liaison with similar bodies in other countries.

One of the first bodies active in the field of adult education in Australia was the Workers' Educational Association, which formed associations in all States in 1913. Its aims are to bring the universities into closer relationship with the community in general and to provide for higher education in civic and cultural subjects. These associations have been superseded by Adult Education Boards or Councils set up by the State governments in Victoria, Queensland, and Tasmania, and by the university in Western Australia. In the other two States, New South Wales and South Australia, the associations continue to co-operate with the universities in their extension work and are given direct grants by the governments concerned.

There are throughout Australia various other organisations which are active in the field of adult education. The World Education Fellowship, for example (*see* page 554) has since its inception in Australia been interested in adult education.

The organisation of adult education and some of the activities in each State are described in Year Book No. 53, pages 625 to 627.

Overseas students in Australian educational institutions

The development of closer ties in education between Australia and other countries and the demand for education in many countries in Asia, Africa, and the Pacific have brought about a growth in the number of overseas students who come to Australia to further their education. Part of the growth and much of the awareness of the facilities available may be attributed directly to the schemes mentioned on page 526. Australian institutions have shown a readiness to accept overseas students, and in many cases special provisions have been made to suit their needs. Nevertheless, population growth and the demand for education, especially for higher education, within Australia have forced many institutions to restrict the admission of overseas students in common with Australian students.

A survey by the Department of Education and Science in June 1968 identified 1,492 government sponsored overseas students in institutions of higher learning in Australia, 1,154 of them under the Colombo Plan Technical Co-operation Scheme. The largest numbers come from Malaysia (487), Indonesia (174) and Singapore (142). Altogether, 1,234 such students came from Asian countries and 145 from African countries. In addition to the numbers in tertiary level courses, it is estimated from information held by the Department of External Affairs that there were about 680 students under these types of sponsorship following other courses of training. Also, some personnel of overseas armed forces were taking courses at Australian Defence Colleges. Thus, about 2,200 government sponsored overseas students were in Australia in 1968. This compares with about 800 such students in 1956.

Estimates are also available of the total number of overseas students in Australian institutions of higher learning in 1967. Universities reported 5,380 students, technical colleges (diploma and higher certificate courses) 1,337, and 512 studied at other institutions, making a total of 7,229 students. Their fields of study were as follows: humanities 818, education 345, fine arts 494, law and social sciences 1,377, medicine and related fields 812, natural sciences, etc, 1,094, engineering 1936, agriculture 353. The above figures include government sponsored and private students, but exclude overseas students in courses of training below the advanced level (e.g. trade and certificate courses at technical colleges).

The Department of Immigration has estimated that, in 1968, there were about 10,000 persons in Australia, who came to Australia under private arrangements specifically for study at any level.

Organisations associated with education

Australian Council for Educational Research

The Australian Council for Educational Research, a non-governmental body, is engaged on educational research in a wide variety of fields, ranging from tertiary to pre-school education. It conducts surveys and inquiries, makes grants to approved educational investigators, serves as a centre for disseminating educational information, provides training for research workers, and standardises and distributes educational and psychological tests for use in Australia. Although this council is an autonomous body, the Commonwealth and State governments give substantial financial support.

World Education Fellowship

The World Education Fellowship is a world organisation of parents, educators and other citizens interested in the development of new educational practices. It was founded in London in 1915 and spread to Australia at the time of a regional conference held here in 1937. There are now sections in each State. Its Australia-wide journal *New Horizons in Education* is published twice a year.

Australian College of Education

The Australian College of Education was formed in 1959. Its aim is to bring together leading teachers and administrators in every field of education, to raise the standard of the profession of education in Australia, to establish and proclaim fundamental educational values, and to recognise outstanding contributions to educational practice. Chapters of the College have been set up in all States, and several of the addresses and papers delivered at meetings of the College have been issued in published form.

Parent and citizen organisations

In Australia, where all government schools are administered by central departments, there is limited opportunity for local participation in education. Public interest is expressed through parents committees or organisations of parents and other citizens interested in supporting their local school. The Education Acts of all States provide for the formation of groups of this type, whose aims are to promote an interest in the school by bringing parents and teaching staff together, to help provide supplementary teaching aids and recreation materials, to foster the regular attendance of children at school, and to help find accommodation for teachers. In several States the general maintenance of school buildings, equipment and grounds is a statutory responsibility of the parent groups, costs being covered by government grants. Lunch canteen services at local schools are maintained by groups in some States. Parent groups have established school children's insurance schemes, operated through State Government insurance offices or private insurance companies. These schemes cover accidents to children which occur between the time of leaving home for school and returning home by the usual direct route.

State-wide councils of federations of parents groups are associated in a federal body, the Australian Council of School Organisations.

Expenditure on education

The presentation in the following tables is based on the Australian National Accounts. The figures *exclude* expenditure on goods and services which do not enter the market, such as education provided in the home, or for which it is not practical to impute a value, such as the unpaid services of some teachers, or certain educational services which cannot be separated readily from other services, such as instruction on the job. Most of the education services provided by public authorities are included. Some education services are provided by trading enterprises, such as business colleges, but it is not possible to provide separate figures of their transactions. Nor is it possible to provide separate figures for the expenditure of non-profit organisations, such as non-government schools. Information for these organisations is insufficient to make direct estimates of the cost value of their services. Their contribution is included as part of personal consumption expenditure on education.

Current and capital transactions are shown separately. Current expenditure by public authorities on goods and services classified to education is measured net of receipts, such as fees. These fees are included in private consumption expenditure. Gross fixed capital expenditure represents the value of new capital assets, such as new buildings and additions to buildings, equipment, etc. While it is possible to show to some extent details of education expenditure incurred by the various public authorities, it is not possible to provide consistent figures in total of expenditure on various types of education. Generally, expenditure on libraries, cultural activities, and the like is excluded from 'education', as are most education services provided in the armed forces, at health and welfare institutions, prisons, and the like. Identifiable expenditure on education administration and educational research is, however, included. In many cases strict definitions cannot be applied. Thus it is not possible to differentiate between the components of scholarships which are intended for education fees, textbooks, etc. (clearly education expenditure) and those intended as living allowances.

University research cannot be separated from universities expenditure on teaching. With the exception of expenditure on fees, private expenditure on education (such as for books, equipment provided by parents associations, and the like) cannot be identified and is therefore excluded.

ESTIMATES OF EXPENDITURE ON EDUCATION: AUSTRALIA
1963-64 TO 1967-68
($ million)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*p
PUBLIC AUTHORITY SECTOR					
Direct expenditure on goods and services classified to education(*a*)—					
Net current expenditure—					
Commonwealth authorities	13	17	20	22	28
State and local government authorities	399	458	499	555	625
Total net current expenditure	412	475	518	578	653
Gross fixed capital expenditure—					
Commonwealth authorities	8	8	8	10	13
State and local government authorities	114	127	155	164	172
Total gross fixed capital expenditure	121	135	164	174	185
Total direct expenditure—					
Commonwealth authorities	21	25	28	33	41
State and local government authorities	513	585	654	719	797
Total, public authority sector	*534*	*610*	*682*	*752*	*838*
PRIVATE SECTOR(*a*)					
Personal consumption expenditure on education	91	101	109	122	140
Gross private fixed capital expenditure on education	25	26	32	35	31
Total, private sector	*116*	*127*	*141*	*157*	*171*
TOTAL EXPENDITURE ON EDUCATION					
Grand total	**650**	**737**	**823**	**909**	**1,009**

(*a*) Transfer payments from the public authority to the private sector are included in personal consumption expenditure and therefore excluded from the public authority sector.

Direct expenditure of public authorities excludes government payments to persons and non-profit organisations. Such transfer payments from the public authority to the private sector consist mainly of scholarships to persons and grants to non-government schools. They include all scholarship payments, whether or not they are intended towards the payment of fees or towards living expenses. Total government expenditure on education, including such transfer payments, is set out in the following table.

ESTIMATES OF PUBLIC AUTHORITY EXPENDITURE ON EDUCATION: AUSTRALIA
1963-64 TO 1967-68
($ million)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*p
Direct expenditure of public authorities	534	610	682	752	838
Transfer payments to the private sector—					
Cash benefits—					
From Commonwealth authorities	10	16	21	27	28
From State and local government authorities	7	8	13	14	18
Grants towards private capital expenditure—					
From Commonwealth authorities	. .	. .	. .	. .	1
From State and local government authorities	. .	3	3	3	5
Total transfer payments	*18*	*28*	*37*	*45*	*52*
Total expenditure on education by public authority sector	**552**	**638**	**719**	**797**	**890**

Because of conceptual and accounting differences the figures above are not strictly comparable with figures of State expenditure on schools, technical education, etc., Commonwealth expenditure on education, and university expenditure shown in other sections of this chapter.

CULTURAL ACTIVITIES

Libraries

The Munn-Pitt report of 1935 greatly stimulated interest in libraries and librarianship throughout Australia. This is evidenced by the development of libraries, the passing of legislation in all States to increase library services, and the establishment in 1937 of the Australian Institute of Librarians to improve the standard of librarianship. This body was reconstituted in 1949 as the Library Association of Australia and incorporated by Royal Charter in 1963, and its functions now include the promotion and improvement of libraries and library services. The Association conducts annual examinations in all States, for which students are prepared by courses of instruction. Formal library schools are conducted by the National Library of Australia, Canberra, the Library Board of New South Wales (held at Newcastle Public Library), and the State Library of Victoria, Melbourne. In 1960 the first library school to be attached to an Australian University was opened in the University of New South Wales. The Royal Melbourne Institute of Technology set up a library school in 1963 and other colleges of advanced education are in the process of establishing library schools. In 1965 the New South Wales Department of Technical Education established a course in librarianship at the Sydney Technical College.

Commonwealth libraries

National Library of Australia. This Library grew directly from the Library of the Commonwealth Parliament established in Melbourne in 1901, the Committee of which soon afterwards announced its intention of developing a library patterned on the Library of Congress at Washington, U.S.A., capable of serving purposes beyond those essential to the Parliament itself, appropriate to a national library and on a national scale. This policy was steadily pursued, so that, in addition to its primary function of serving Parliament, it gradually became a central source of information for the Government and its departments and other agencies, and assumed increasing reference and bibliographical responsibilities in relation to scholarship and research in Australia and abroad. It was also influenced by the basic elements of the national library concept of the older countries of Europe: namely, that a national library is the proper place to collect the national literature systematically and to make it known and available for use, and that it is a place to which scholars may turn for what is most significant in the literature of other countries. For these growing extra-Parliamentary activities the Parliamentary Library Committee, in 1923, adopted the title of Commonwealth National Library.

In 1957 a committee appointed to examine the future control and functions of the Commonwealth National Library recommended its establishment as the National Library of Australia separate from the Parliamentary Library, with wide functions and controlled by a board subject to a Minister; the transfer, as a separate agency to an appropriate department, of its Archives Division, which constituted the Commonwealth's agency for the custody and organisation of departmental records of permanent value which need no longer be held within departmental offices; and that the Parliamentary Library be a separate library under separate Parliamentary control. Continuing co-operation, where possible, between the two libraries was also proposed.

Effect was given to these recommendations by the *National Library Act* 1960, which created the National Library of Australia as a body corporate under the control of a Council of nine members, of whom one is a Senator elected by the Senate, one a member of the House of Representatives elected by that House, and seven appointed by the Governor-General. Its functions are: to maintain and develop a national collection of library material, including a comprehensive collection relating to Australia and the Australian people; to make the national collection available to such persons and institutions in such manner and subject to such conditions as the Council determines with a view to its most advantageous use in the national interest; to make available such other services in relation to library matters and material, including bibliographical services, as the Council thinks fit, particularly for the purposes of the library of the Parliament, the departments and authorities of the Commonwealth, and the Territories of the Commonwealth; and to co-operate in library matters (including the advancement of library science) with authorities or persons, whether in Australia or elsewhere. Its collections and services are housed in the permanent National Library building, opened in August 1968.

The National Library comprehensively collects and preserves Australian books, periodicals, newspapers, government publications, pictures, prints, manuscripts, maps, moving picture films, and sound recordings. It is assisted in this by the deposit provisions of the *Copyright Act* 1912–1966 and has also been enriched by the acquisition of such notable collections as the Petherick collection of 16,500 items in 1911, the Cook manuscripts in 1923, the Cumpston collection on Public Health in Australia in 1936, the Mathews Ornithological collection in 1940, the Nan Kivell collection of 16,000 items of Australian and Pacific interest including original paintings, prints, manuscripts, and printed material in 1959, and the Ferguson collection which is still under transfer.

A feature of the Library's Australian work is the copying on microfilm, in association with the Public Library of New South Wales, of all important unique material overseas relating to Australia, including over three million pages in the Public Record Office in London. The Library maintains a permanent exhibition of selected paintings, prints and other historical material from its collections.

The bibliographical and co-operative functions of the Library embrace a number of activities, including co-operation in the international shared cataloguing programme. *Australian National Bibliography*, which appears weekly, monthly and annually, lists books published in Australia and books dealing wholly or substantially with an Australian subject or written by Australian authors. Associated with this compilation the Library provides a catalogue card service to libraries and others wishing to use its catalogue cards for Australian books. The publications of Australian governments, included in *Australian National Bibliography*, are also listed annually in *Australian Government Publications* and a subject list of serials is published each year under the title *Current Australian Serials*. The Library has commenced work to bridge the gap between J. A. Ferguson's *Bibliography of Australia* and the commencement of its *Annual Catalogue of Australian Publications* by the preparation of a bibliography covering the years 1901 to 1935. To provide a guide to representative works relating to Australia the Library also publishes annually *Australian Books: a Select List*. The Library's principal activity in subject bibliography is its *Australian Public Affairs Information Service*, published monthly since 1945, with annual cumulations since 1955. This is prepared as a guide to material on Australian political, economic, social and cultural affairs. It indexes relevant articles in a wide range of periodicals published both in Australia and overseas and all articles, whatever their subject, in a selected list of Australian periodicals chosen for indexing because of their importance in the social sciences and the humanities. The Library is establishing an Australian centre for the International Medical Literature Analysis and Retrieval System.

Co-operative bibliographical activity includes recording, in a series of union catalogues, the holdings of the major Australian libraries. The national union catalogue of monographs was commenced in 1960, since when all the larger and an increasing number of the smaller libraries have reported their monograph accessions to the National Library. In addition, the National Library has microfilmed the catalogues of some 25 libraries and has converted the film to cards. The major published union catalogue is the loose leaf, continually revised *Serials in Australian Libraries, Social Sciences and Humanities*, which complements another catalogue, *Scientific Serials in Australian Libraries* published by the Commonwealth Scientific and Industrial Research Organisation. Other union catalogues published by the National Library with the co-operation of a number of libraries and repositories are the *Guide to Collections of Manuscripts Relating to Australia* and *Newspapers in Australian Libraries: a Union List*. On the union catalogues, the Library bases a location service which, through Telex communication, has become increasingly effective in expediting reference, inter-library loan and photocopying services.

The National Library provides resources for the work of the Australian Advisory Council on Bibliographical Services, through its Secretariat, which is administratively part of the Library. Though an advisory body only, it takes part in the co-ordination of library and bibliographical services in Australia. It represents the major libraries and library services through their governing bodies and principal librarians, and library activities generally through the Library Association of Australia. Its publications include *Current Projects in Library Automation; an Australian Directory* (1967, new edition in progress).

The Library acts as a central library of documentary and educational films, its film collection containing approximately 8,000 titles, together with Australian historical films and a great number of film strips. It published *Australian Films: a Catalogue of Scientific, Educational and Cultural Films, 1940–58* in 1959 and annual supplements in succeeding years. A revised edition of the *Catalogue of* 16-*mm. Films*, which lists all films available for loan, was published in 1960. It was supplemented in 1964 and annual accession lists are issued. Special efforts are made to discover and preserve samples of early Australian film production.

Through its Extension Services Section the Library conducts the Canberra Public Library Service for residents of the Australian Capital Territory, to whom 959,707 loans were made during 1967–68. It also assists in the provision of similar services in the Northern Territory, the Territory of Papua and New Guinea, and Norfolk Island.

The National Library's collections contain approximately 1,000,000 volumes, 26,500 paintings, pictures and prints, 23,500 reels of microfilm, 1,860 running feet of manuscripts, 25,000 motion picture stills, 16,700 reels of moving picture films, 175,700 maps, and 450,000 aerial photographs. Special features of the book collection are its strong holdings of Australiana, materials relating to the Pacific area and east and south-east Asia, the publications of foreign governments and international organisations, and works in the social sciences, particularly in political theory and economics.

Patent Office Library. The Library of the Commonwealth Patent Office, Canberra, contains approximately 12,000 books and a wide variety of periodicals and other literature relating to pure and applied science, industrial technology and the industrial property (patent, trade mark, design and copyright) laws and practice of most countries. Patent specifications of inventions are received from the principal countries of the world; present holdings are more than 10,030,500. Indexes include a microfilm of a classified index to 3,000,000 U.S.A. patents and translations of abstracts of U.S.S.R. patents.

Commonwealth Scientific and Industrial Research Organization. The library holdings of the Organization cover the pure and applied sciences. In addition to the Central Library in East Melbourne, each of the Divisions and Sections has a specialised collection covering such subjects as food preservation, forest products, chemistry, physics, animal health, and fisheries. The collections are particularly strong in the publications of overseas scientific and technical research institutions, with many of which extensive exchange arrangements have been made.

The Central Library maintains a union catalogue of the holdings of all C.S.I.R.O. libraries and is responsible for the following publications: *Scientific Serials in Australian Libraries; Australian Science Index*, an index of articles published in Australian scientific and technical periodicals; a *Directory of Scientific and Technical Research Centres in Australia;* and *C.S.I.R.O. Abstracts*, which include abstracts of papers published by C.S.I.R.O. officers, C.S.I.R.O. translations, translations available from other Australian organisations, and additions to the British Commonwealth Index of Scientific Translations. The larger libraries in the Organisation have photocopying facilities which, while normally for internal use, provide a service for the public when a publication is not held elsewhere in Australia.

The Australian War Memorial Library. In the War Memorial library are housed the documentary and pictorial records of Australia's fighting services in the 1914–18 and 1939–45 Wars, together with collections covering the war in Korea, 1950–53, and earlier wars in which Australian troops participated —Sudan, 1885; South Africa, 1899–1902; and the Boxer Rebellion in China, 1900–01. Books, periodicals and other records covering contemporary trends and events in the fields of military history and military science are constantly being added, including a coverage of operations in South Vietnam.

The printed records section contains over 70,000 volumes, a large collection of military maps, newscuttings and newspapers, sound recordings of war leaders, personalities and events, war posters, and postage stamps. Many personal collections by distinguished soldiers and historical documents relating to the wars have also been placed in the Memorial's custody for preservation. Written records comprise correspondence files of headquarters and units of both World Wars, and the original war diaries compiled from day to day by each unit during its service. The collection of official war photographs covering the 1914–18, 1939–45 and Korean Wars numbers over 250,000, and a collection of official motion picture film depicts Australia at war. Facilities for public research are not yet fully developed, but requests for information are met where practicable.

Other Commonwealth Government libraries. Most Commonwealth authorities have specialised collections in their own fields and in addition draw largely on the National Library.

Northern Territory Library Service. The Northern Territory Library Service maintains five centres in the Territory. At 30 June 1968 stocks totalled 61,750 volumes which were held at the following centres: Darwin, 27,430; Nightcliff, 6,860; Alice Springs, 17,348; Tennant Creek, 5,438; Katherine, 4,674.

State libraries

State Public Libraries. In each of the capital cities there is a well-equipped public library, the libraries in Melbourne and Sydney especially comparing very favourably with similar institutions elsewhere in the world. The following paragraphs describe these libraries and other library services in each State.

New South Wales. The Free Library Movement in New South Wales, founded for the establishment of a system of public libraries on the basis suggested in the Munn-Pitt Report of 1935, helped to pave the way for the Library Act, 1939–1959, which was fully proclaimed as from 1 January 1944. At 30 June 1968, 178 councils had established libraries in terms of the Library Act. During 1968 they spent on their libraries $4,998,184 including $1,111,573 received in subsidy. There are 247 libraries, of which 82 are in the metropolitan area and 165 in the country. There are also 23 bookmobiles, of which 2 are in Sydney, 7 in the suburbs of Sydney, and 14 in country municipalities and shires. These libraries contain 3,746,489 volumes. The State Library provides a central cataloguing service for municipal and shire libraries constituted under the Act.

The State Library, known as the Public Library of New South Wales, includes a General Reference Department of 560,908 volumes, a Circulation Department, together with the Shakespeare Tercentenary Memorial Library, and the Mitchell and Dixson Libraries and Galleries which are mainly devoted to Australian and Pacific material. The Circulation Department lends books to municipal and shire libraries and to individual borrowers. The total stock of the Department is 69,079 volumes, and 42,815 books were lent to public libraries and individual borrowers during 1967–68. The Mitchell Library, with more than 60,000 volumes and pamphlets and 300 paintings, was bequeathed to the trustees of the Public Library in 1907 by Mr D. S. Mitchell, together with an endowment of $140,000. In 1968 there were 235,325 volumes in the library, in addition to valuable manuscripts, maps and other material. In 1929 Sir William Dixson gave a collection of historical pictures then valued at $50,000. These were subsequently added to and at his death in 1952 Sir William bequeathed the whole of his collection of books, manuscripts, pictures and other material, together with an endowment of more than $226,000, mainly for the printing or reprinting of historical documents relating to Australia and the Pacific. The total number of volumes in the State Library now exceeds 918,000 apart from manuscripts, historical pictures and other material. The State Library maintains an adult education section servicing adult education activities for the Universities of Sydney and New England and the Workers Educational Association.

The maintenance and control of the ordinary lending branch of the Public Library were transferred in 1908 to the Sydney Municipal Council to become the City of Sydney Public Library. The State Library, which had previously been the repository for State archives, transferred this responsibility to an Archives Authority in June 1961. The Authority consists of nine members, of whom the trustees of the Public Library have a right to nominate one.

Other important libraries in New South Wales are: Teachers Colleges, 326,043 volumes; the City of Sydney Public Library, 250,562; Technical Education Branch, 249,881; Railway Institute 169,853; Parliamentary Library, 135,000; Australian Museum, 35,630; Government Transport Institute, 25,818; New South Wales Teachers' Federation Library, 24,000; Workers' Educational Association, 15,000; and the Library at the National Herbarium, 11,226 volumes.

Victoria. The modern movement in municipal library service dates from the inception of the Free Library Service Board in 1947. The Free Library Service Board was a State Government instrumentality which planned, encouraged and subsidised the development of municipal library services. Under the *Library Council of Victoria Act* 1965 the control of the Board passed to the Library Council of Victoria and in 1966 its office was redesignated the Library Services Division of the Library Council.

In 1969, 151 Councils, representing 2,776,000 Victorians, shared Government library grants amounting to $1,275,000. Of this amount, $1,197,234 was direct municipal library subsidy. With the addition of expenditure from these Councils' own funds the total expenditure on municipal library services for 1968–69 will be nearly $3,250,000, representing an average expenditure of approximately $1.20 per head of the population served. In 1968, 610,000 borrowers used the free library services, now totalling 2,100,000 books, to the extent of 12,210,000 issues.

Particularly in the country, service has been developed by means of regional libraries. These services, of which there are 23 at present, comprising a total of 102 councils, consist of groups of councils which pool their resources, book-stocks and trained staff. A development since 1962 has been the formation of three Metropolitan Regional Library Services. The Victorian Government provides an Establishment and Regional Library Development Grant of $60,000 per annum.

There are 9 bookmobile services operating in Victoria, 6 in country regions and 3 in the metropolitan area.

The State Library of Victoria was established in 1856. It is controlled by the Library Council of Victoria and receives its finance from the State Government. The reference collections now total about 860,000 items, and the lending and travelling libraries have another 185,000 volumes. In addition, the State Library receives 6,660 periodicals, annuals and newspapers. A copy of each book, periodical and newspaper published in Victoria is deposited in the Library. Special collections include the J. K. Moir Collection of Australiana, the M. V. Anderson Chess Collection, and the Green and Brodie Shipping Collections. The Victorian Historical Collection contains pictures, drawings, prints, and objects of historical interest. The Archives Division is responsible for the preservation of government records.

Queensland. The Library Board of Queensland was established in 1945 under the provisions of '*The Libraries Act of* 1943'. Its duty is to attain the fullest co-operation and improvement of the library facilities of the State, with the object of placing such facilities on a sound basis for the benefit and educational improvement of the citizens generally. The Board consists of six members including the State Librarian as *ex officio* member and secretary. A general function of the Board is to ensure that the fullest co-operation exists with the Department of Education, the University of Queensland, local bodies, and other bodies having for their object the encouragement of education, literature and the arts and sciences. A specific function of the Board is the control and management of the Public Library of Queensland. Its policy is to build up the main collection of the Library as the State's reference centre.

The Country Extension Service, which is administered as a department of the Public Library, lends books on non-fiction to adults and children residing outside the metropolitan area and to municipal libraries in areas of low population.

The Oxley Memorial Library, established in 1923, has been administered as a department of the Public Library since 1946, but the collection has been kept separate. It contains books, manuscripts, pamphlets, and other graphic material relating to the history and literature of Australia, and of Queensland in particular, and provides facilities for research students in Queensland literature and history.

In 1958 the section of the Libraries Act dealing with the preservation of public records was proclaimed, and in 1959 an Archives Section of the Public Library was instituted.

The Library Board staffs 13 libraries for 11 government departments of which the largest is the Department of Primary Industries. The work is co-ordinated by an officer-in-charge, who also gives assistance and advice to independently staffed departmental libraries.

Since 1948 a course in librarianship has been held annually at the Public Library to prepare trainees for the examinations of the Library Association of Australia. In 1959 a course covering some subjects of the Association's Registration Examination was inaugurated at the Central Technical College, Brisbane.

The holdings of the Public Library of Queensland and its extension services in 1967–68 were: main reference collection, 201,350 volumes and 11,856 maps and pamphlets; Country Extension Service, 90,828; Oxley Memorial Library, 25,758 volumes and 33,150 maps, pamphlets and miscellaneous items.

Local authorities are empowered by the Libraries Act to establish and conduct library services as a function of local government. The Board encourages local authorities to use these powers. In 1967–68, 80 local authorities were conducting 140 library services. The Brisbane City Council has established 21 of these libraries. There were 113 libraries in Queensland free to adults. To help overcome the problems of a large area and sparse population, various local authorities provide library services on a regional basis. By 30 June 1968, 4 regional library services had been established; the South Western (7 shires), the Central Western (8 shires), the North Western (10 shires), and the Central Highlands (5 shires), with headquarters at Charleville, Barcaldine, Mount Isa and Emerald, respectively. During 1967–68 the Board received a grant of $660,087 from consolidated revenue to finance the activities of the Public Library and to pay subsidies to local bodies conducting free library services of 50 per cent of endowable expenditure on books and the acquisition or improvement of library buildings and equipment with an upper limit of $8,000 in respect of new library buildings, and seventy-five per cent of endowable expenditure on books, equipment and maintenance to local bodies conducting subscription libraries. Subsidies were paid to 4 regional library service boards, 75 local authorities and 33 other bodies.

The Parliamentary Library of Queensland was established by the first Parliament in 1860. At 30 June 1968 it contained 98,000 volumes and pamphlets. Included in its collection are long sets of periodicals, newspapers, statutes and government publications, which are currently maintained. The books are devoted largely to the social sciences, although history, geography and biography are well represented. Among the features of its service to Members of Parliament are its newspaper clippings file and copying facilities.

'*The Libraries Act Amendment Act of* 1949' provides for the Public Library and the Parliamentary Library each to receive a copy of all books, pamphlets, maps and other printed material published in Queensland.

South Australia. In the Reference Department of the State Library of South Australia there are 250,721 volumes, most of which may be borrowed. Approximately 5,000 periodical titles are filed and the collection of newspapers includes every newspaper printed in South Australia. There are 48,266 volumes in the Adelaide Lending Service; these books are available to persons living in the metropolitan area. The Country Lending Service has 360,965 volumes, of which more than one-third are suitable for children. The Adelaide Lending Service lent 316,575 books in 1967–68, and the Country Lending Service, 199,951. The Library has an active programme for the publishing of facsimile editions of early Australian texts.

The Research Service specialises in scientific and technical inquiries and supplements the resources of the State Library by borrowing from other libraries and by obtaining microfilm copies of material not available locally. It has an extensive collection of trade catalogues and standards.

The library of the Parliament of South Australia held approximately 60,000 volumes in 1968.

There are 29 local public libraries in South Australia provided by 22 local government and other authorities. The libraries are subsidised on a $1 for $1 basis by the State Government. The Libraries Board of South Australia, through the State Library of South Australia, provides various central services. Book-stocks are pooled in the State Library of South Australia and are interchanged between the libraries.

At the end of June 1968 these local public libraries contained 233,193 books. There were 143,147 registered borrowers. During 1967–68, 1,942,494 books were lent.

Western Australia. In 1955 the Library Board of Western Australia was made responsible for all public library services throughout the State to which the State Government contributes funds. The Board has the following major functions: to encourage local authorities throughout the State to establish public libraries and to provide as a State subsidy all books and bibliographical services necessary for such libraries; to administer the State Reference Library; to advise the Government on all matters relating to libraries; and to provide for the training of librarians.

Local public libraries are subsidised on a $1 for $1 basis, the local authority providing accommodation and staffing and the Board all books and related services. The Board provides at least one volume per head of the population. All non-fiction books may be made available at any public library throughout the State on request to the Board. All cataloguing is done by the Board. The first library under this scheme was opened in August 1954. By 31 December 1968, 111 libraries had been established.

The State Reference Library, established in 1887, is the reference division of the Library and Information Service of Western Australia. In addition to providing the normal facilities of a reference library for the metropolitan area, it extends its service throughout the State through local public libraries. It is divided into three divisions responsible for service in the subject fields of Western Australian history, science and technology, and the humanities.

The State Bibliographical Centre and the Central Music Library are housed in the State Reference Library Building, and there is also a commercial information centre. The State archives are maintained by the State Reference Library and managed by the staff of the Battye Library. The State Reference Library is fully equipped with microfilm and photocopy apparatus.

The book-stock of the Board at 30 June 1968 was: 858,997 volumes, comprising circulation stock (including books in public libraries), 606,379 volumes; State Reference Library, 236,230 bound volumes; Central Music Library, 3,665 books on music and 12,723 scores.

There are over 130 special libraries in government departments and industrial firms. Union catalogues of periodicals and books received in the libraries in Western Australia are maintained by the Library Board of Western Australia in the Bibliographical Centre in the State Reference Library building.

Tasmania. The Tasmanian Library Board administers the State Library in Hobart, the extension of library services throughout the State and State aid to libraries, and controls the State Archives. State Government expenditure on library services in 1967–68 was $553,933

Through the State Library, the Board provides reference and information services, documentary film and recorded music libraries, and arranges recorded music recitals, film screenings, displays, exhibitions. etc. Two bookmobiles, based in Hobart, provide a library service to the rural areas of fourteen southern municipalities. All municipalities receive loans of children's books, the number of books being dependent on the child population of each municipality.

To qualify for State aid for an adults library, a municipal council is required to spend on library services an amount equal to a rate of 0.25 cents in the dollar of the assessed annual value of all rateable property in the municipality. In 1968 all municipalities except Glamorgan received assistance. The Board's aid consists of the loan of collections of books at least equal in value to municipal expenditure from rates. Most of the books supplied this way are exchanged by the Board each year.

A regional library, formed by the Board to give a more efficient and comprehensive service, operates in the north-western municipalities of Penguin, Burnie, Circular Head, Wynyard and Waratah, with headquarters in Burnie. The regional scheme has a reference library in Burnie, small libraries in the larger towns and a bookmobile for rural areas.

The Hobart City Council library service is amalgamated with the State Library in Hobart and is run by the Board. In addition, a bookmobile serves schools in the metropolitan area. The libraries of the cities of Glenorchy and Launceston are administered by the Board; a bookmobile serves municipalities close to Launceston. At 30 June 1968 the State Library in Hobart held 115,593 reference volumes and 102,888 lending volumes. Municipal libraries (which include Launceston and Glenorchy) had 381,256 books, of which 162,835 were children's books. The State Library works closely with the Parliamentary Library and provides a reference officer to help with Members' queries when Parliament is in session.

University libraries

These libraries provide material not only for the education of graduates and undergraduates, but also for research workers and practical investigators all over the continent. Much of the material they contain is not available elsewhere, for although in most cases smaller, they are in many directions more highly specialised than the public libraries. They lend to one another and to State and private institutions as well as to individual investigators. Each of them is governed by a librarian, who is responsible as a rule to an executive sub-committee and a committee which is practically co-extensive with the professorial staff.

The following table shows the volumes held, accessions during the year, and expenditure of the Australian university libraries.

UNIVERSITY LIBRARIES

University	*Volumes* (*a*)	*Accessions during year* (*b*)	*Expenditure* (*c*)
	'000	'000	$'000
Australian National	478	45	798
Sydney	1,141	87	1,201
New South Wales	460	47	780
New England	246	18	266
Newcastle	125	11	205
Macquarie	156	62	289
Melbourne	536	30	803
Monash	291	49	886
La Trobe	76	20	340
Queensland	556	71	820
Adelaide	472	31	574
Flinders	112	16	285
Western Australia	324	19	416
Tasmania	166	11	250
Total	**5,139**	**517**	**7,915**

(*a*) 30 June 1968. (*b*) Year ended 30 June 1968. (*c*) During year ended 31 December 1967.

Australian National University. This library comprises three main sections attached to the Institute of Advanced Studies, the School of General Studies, and the Centre of Oriental Studies. The Advanced Studies collection of some 260,000 volumes is closely related to the special interests of the six Research Schools in the Institute. It has a wide range of periodical literature and is strong in the fields of anthropology and linguistics, mathematics, mathematical statistics, physics, chemistry and the non-clinical medical sciences, and has sought to acquire a good working collection of secondary material of high standard in the social sciences. The General Studies collection (135,000 volumes) is designed to further teaching at all levels in the Faculties of Arts, Economics and Science, and to provide research facilities in the humanities. The Oriental collection (mainly Chinese, Japanese and Indonesian) is primarily a research collection and at present contains 82,000 volumes. Branch libraries have been established to serve the Faculty of Law (22,000 volumes), the John Curtin School of Medical Research, the Research School of Physical Sciences, the Research School of Chemistry, the Research School of Biological Sciences, the Department of Astronomy at Mount Stromlo and the New Guinea Research Unit at Port Moresby. The resources of the National Library of Australia are available to members of the University, who also have access to many specialised collections of material held by government instrumentalities in Canberra.

University of Sydney. The library consists of the central collections, housed in the Fisher Library, eleven branch libraries including the Law Library, the Medical Library, the Badham Library in agriculture, biology and veterinary science, the Wolstenholme Library in economics, the Engineering Libraries, and a number of departmental libraries. The University Library holds a total of more than one million volumes.

The first books were acquired in 1851, and shortly afterwards the library of Sydney College was added. The collection of Nichol D. Stenhouse was acquired in 1878 as the gift of Thomas Walker. In 1885 Thomas Fisher bequeathed the sum of $60,000, the income from which is used as a book fund. The Fisher Fund was matched in 1961 by establishment of the W. H. and Elizabeth M. Deane Library Fund. Perhaps the finest collection in extent and importance which has been given to the University is that of Sir Charles Nicholson. There have been numerous other benefactions, among which may be mentioned the library of Sir Francis Anderson, the W. H. Deane collection of books and manuscripts and the Dalley-Scarlett music library. In 1961 the University acquired the English literature collection of the late Hugh Macdonald, and the late Professor J. Stewart's library, an outstanding collection on archaeology and numismatics, was acquired in 1963. The Sydney University Library has an extensive collection of mediaeval manuscripts and early printed books.

University of New South Wales. The libraries in this university consist of the Central Library and a Bio-medical Library at Kensington. There is also a library at Wollongong University College and the Broken Hill Division.

University of New England. The library was founded in 1938, when the New England University College was established. Sir William Dixson was its first benefactor. The library is adding to its collection at the rate of approximately 20,000 volumes a year. It receives approximately 5,500 current periodicals annually. It is housed in a three-storied, air-conditioned building, which also makes provision for a bindery and photographic and archives division. A post-graduate and research library is planned as an extension of the present building. The library has its own lecturer in bibliography and library service and conducts formal courses in librarianship. A multi-copy collection of 36,000 volumes for external teaching is housed in the Public Library of New South Wales in Sydney.

University of Newcastle. Beginning in 1951 with science-technology materials and associated, through common staffing and housing, with Newcastle Technical College Library until 1961, the library now has a collection of 135,000 volumes and is increasing at the rate of about 13,000 volumes per year. More than 4,000 periodicals are received regularly by subscription and donation. The resources of the library are used extensively on inter-library loan both within the Newcastle district, particularly by local industries, and increasingly, as the library's resources grow, by the other research libraries of the country.

The first stage of the permanent library building was completed in January 1968. To it will be brought, as the departments move to Shortland, the one-eighth of the collection still at Tighes Hill. There are no departmental libraries.

Macquarie University. The library began in 1965 to acquire books and to plan for its opening in 1967. It occupied temporary quarters in North Sydney until mid-1967, when it moved into the first stage of a new air-conditioned building, which is centrally situated on the university site at North Ryde and planned to house eventually 800,000 volumes. The library subscribes to 2,583 serials and has an audio-visual area. When the library opened in March 1967, approximately half of its total collection of 70,000 volumes had been donated by private individuals, firms and other libraries. On 1 January, 1969 its stock stood at 189,481 and its acquisition programme was still being heavily supported by donors. The library staff conducts an extensive programme of lectures and tutorials in bibliography and library use for both undergraduate and post-graduate students.

University of Melbourne. Early in 1854 the first allocation for books was made, but the library was housed in temporary quarters until 1959. The W. L. Baillieu Trust made available the first instalments of a $200,000 gift for building purposes, which have been followed by subsequent gifts and substantial grants from the Commonwealth and State Governments, and a new building was occupied at the beginning of 1959, the first in the university to be designed specifically for library purposes. Since 1959 the use of the library has increased fourfold, and during the academic year admissions of readers to the building averaged 8,000 a day. The building has become inadequate for all purposes and a doubling of its present floor area is required urgently. The resources of the library are also used extensively on inter-library loan by government instrumentalities, industries and other organisations throughout Australia. The University Library, including 13 branch libraries in various departments, is administered from the centrally situated Baillieu Library. The large medical branch library is especially rich in periodicals.

Monash University. The library contains about 310,000 volumes and subscribes to some 7,000 journals. It has been decided that the library organisation will develop into four large units—the main library, a bio-medical library, a law library, and a library for the physical sciences and technology. The physical sciences and technology library has been named the Hargrave Library and was opened in December 1962. The main library, catering mainly for the humanities, was occupied in November 1963. The bio-medical library was occupied in 1966, and the law library in February 1968.

La Trobe University. The university was founded in December 1964 and the first books were acquired in 1965. The library was opened in February 1967; it is a three-storey air-conditioned building which is designed to be extended horizontally. The first stage has accommodation for about 130,000 volumes and 420 readers. By the end of 1968 the library had acquired about 89,000 volumes and received about 2,000 periodicals and serials, catering for the Schools of Agriculture, Biological Sciences, Humanities, Physical Sciences and Social Sciences.

University of Queensland. The library was founded in 1911. There is a main library and a number of departmental libraries at St Lucia, and medical libraries at the Medical School and at teaching hospitals. The library receives more than 15,000 current periodicals. It has notable collections in geology, the history, development and culture of the Pacific region, and tropical aspects of agriculture, veterinary sciences and biological sciences.

University of Adelaide. The main library is the Barr Smith Library which commemorates its first benefactor, Robert Barr Smith, who, with members of his family in and after 1892, gave the university over $100,000 for the library. Seats are provided for 1,000 readers, including 270 in the main reading room. There are branch libraries for medicine, law and music, with seats for 450 readers. The South Australian branches of the Australian Medical Association, the Australian Physiotherapy Association and the Australian Dental Association make annual contributions towards the maintenance of the medical library in return for borrowing privileges for their members. The Waite Agricultural Research Institute has a separately administered library of about 23,500 volumes in agricultural science. Some 15,716 serial titles are received.

The Flinders University of South Australia. The acquisition of books for the library commenced in 1963 when the first library staff were appointed. By the time teaching began in March 1966 a collection of some 60,000 volumes had been assembled. At the end of 1968 the collection contained over 121,000 volumes. Approximately 20,000 volumes are being added each year, and the library receives currently about 3,700 periodical titles. During the early development of the library emphasis is being placed on material to support the current teaching and research programmes of the university. Special attention is being paid to fields where little material is available elsewhere in Australia, for example Spanish literature. The first stage of the library building was occupied at the end of 1965, and the second stage extension which completed the building was finished late in 1967.

University of Western Australia. The first full-time library staff was appointed in 1927. Provision for a permanent library building was not possible when the university moved to its present site, and space and facilities were inadequate for many years. A new four-storey building was completed at the end of 1963 and named the Reid Library after the late Chancellor of the University, Sir Alex Reid. The building has seating accommodation for 1,000 readers and facilities for photo-copying and the reading of microfilms. The University Library developed very slowly in the early years, but recently has been adding about 20,000 volumes a year to its stock. In addition to the Reid Library there are a number of departmental libraries of which the more important are engineering, agriculture, pre-clinical medicine, music and law. There is also a medical library, in accommodation provided by the Royal Perth Hospital, for the use of the Medical School.

University of Tasmania. Although the University of Tasmania was established in 1890, library development was slow and the University Library could not be said to have existed in an organised way until 1913. The present collection numbers about 180,000 volumes and over 4,000 current serial titles. Apart from the main library, where central services are located, there are three branch libraries, five departmental collections on the Sandy Bay campus, and a Clinical Library within the Clinical School of the Faculty of Medicine which is associated with the Royal Hobart Hospital. The University Library also collects private and business archives and has a rare book collection.

Children's libraries and school libraries

New South Wales. Children's libraries are being developed as departments of municipal and shire libraries. The Education Department maintains a school library service for the fostering of State school libraries, which are maintained partly by parents and citizens associations and partly by departmental subsidy. Secondary and central schools, and an increasing number of primary schools, have teacher librarians.

Victoria. Throughout Victoria an essential feature of libraries is the service for children; 134 municipal libraries share in a special children's library grant of $10,000, and on the staff of the Library Services Division is a professional children's librarian who supervises, and advises on, work with children.

The Education Department is making provision for the building of library rooms in new schools. Where accommodation is available in existing schools, library furniture is provided free of cost to the schools, and the Government subsidises the purchase of books. In June 1968, 670 schools had central libraries. The Education Department has a library service officer with a small staff to advise and assist schools in the establishment and organisation of libraries. A one-year course for the training of teacher-librarians was established at Melbourne Teachers' College in 1955. Approximately 60 teachers are trained each year. A four-year course for the training of teacher librarians for secondary schools was instituted in 1968. There is an annual intake of 25 students for this course.

Queensland. The Library Board of Queensland stresses to local bodies the importance of providing adequate library services for children. There are in Queensland 138 libraries free to children, of which 18 are conducted by the Brisbane City Council. The children's libraries at Rockhampton, Toowoomba and Townsville are particularly active. Country children who are not catered for locally may borrow from the Country Extension Service which possesses a separate children's collection. The purchase of books for State school libraries in Queensland is financed by school committees and parents associations, with a subsidy from the Department of Education on a $1 for $1 basis. Trainees at the teachers colleges are instructed in school library organisation and management.

South Australia. A children's library of 38,937 volumes is used by school classes and individual children living in the metropolitan area. In 1967–68, 261,248 books were lent. There is a large collection of historical children's books assembled for the use of research workers. In August 1957 a youth lending service was opened for young people from thirteen to eighteen years of age. It has a stock of 15,292 volumes, and in 1967–68, 111,513 loans were recorded.

Western Australia. The Education Department provides library services, issues of books and subsidies on library books to schools. School libraries are supplied with shelving, furniture, stationery, and library supplies. The Library Services Branch of the department provides advisory services to assist schools in all aspects of library organisation and service. It also relieves schools of the professional and routine tasks of book preparation by providing a central cataloguing service for both new books and those previously uncatalogued in school libraries, a central processing service to cover books in plastic and prepare them for use, and a library book repair and binding service. Book selection in schools is assisted by a model library and by lists of recommended books.

The teachers colleges provide courses in school library organisation and service and have developed college libraries directed by qualified librarians. At the Perth Technical College part-time courses are provided on the syllabus for the examinations of the Library Association of Australia and are attended by many school librarians. The Perth Technical College and technical schools are equipped with libraries, and an allocation of funds is provided annually to each school and college department for the purchase of books and periodicals. Books for technical schools other than Perth Technical College are centrally ordered, catalogued and processed by the Library Services Branch.

All high schools are provided with library accommodation and furniture. New high schools have been provided with a main library, reading room, study room, students' lounge, teachers' lounge and librarian's office. High school libraries are staffed by one or two trained school librarians according to the size of the school and trained library assistants have been appointed to some schools. New high schools are issued with books to a value of $1,000 in each of their first three years and new primary schools are issued with books to the value of $400 in their first year. All high schools receive annually an issue of books, as well as being entitled to a subsidy for the purchase of library books, while all non-government schools with post-junior students receive an annual issue of books for matriculation studies. A number of primary schools have organised school libraries in rooms which have become available, or in premises provided by the parents and citizens associations. Annual issues of books are made to all primary schools, varying according to the size of the school, and a subsidy is provided for the purchase of library books. The Charles Hadley Travelling Library provides 500 boxes of books which are circulated to all small schools, mission schools and special classes. Children who are unable to attend school, mainly those in isolated areas, are provided with books from the Correspondence School's library.

Tasmania. All the State's municipal libraries have Lady Clark Memorial Children's Libraries. The Lady Clark Memorial Children's Library in the State Library in Hobart has 24,300 books and serves schools in the Hobart metropolitan area by bookmobile. More than 150 schools which are not close to a municipal library have collections of books on loan from the Lady Clark Memorial Children's Library.

Special libraries

Before the 1939–45 War the number of special libraries, apart from those maintained by government departments, was small, but during recent years many manufacturing, commercial, research and other firms, as well as statutory bodies, have found it necessary to establish special libraries to serve their staff. These libraries, which are most numerous in Sydney and Melbourne, are being increasingly administered by professional librarians.

Archives

General interest in archives in Australia was aroused in 1888, when the Colony of New South Wales celebrated its centenary, the occasion being marked by official publication in 1889–1894 of the *History of New South Wales from the Records* by G. B. Barton and A. Britton, and in 1893–1898 of the series of *Historical Records of New South Wales*, edited by A. Britton and F. M. Bladen. Both publications were based on transcripts of documents in London which had been made by Mr James Bonwick, appointed Archivist by the Government of New South Wales in 1884.

In 1902 Mr F. M. Bladen presented to the Commonwealth Government a report on European Archives, in which he recommended the establishment of a Commonwealth Archives Office and the copying of further official records in London. The copying project continued and some of its results were embodied in the volumes of *Historical Records of Australia*, published by the Commonwealth in 1914–1925, under the editorship of Dr J. F. Watson.

Measures for the preservation and storage of original documents were not taken until later years. In the absence of duly constituted archives offices, the various major libraries throughout Australia undertook the collection of historical records, both from official and private sources. An Archives Department of the Public Library of South Australia was established in 1920, and other institutions formed archives branches in, 1944 (Commonwealth National Library), 1945 (Public Library of Western Australia), 1948 (State Library of Victoria), 1949 (State Library of Tasmania), 1953 (Public Library of New South Wales), and 1959 (State Library of Queensland). Legislation to govern arrangements for official records was passed as follows: South Australia (1925, 1936), Tasmania (1943, 1965), Queensland (1943) and New South Wales (1960). Since 1961, separate authorities for official archives have been established: Commonwealth Archives Office, 1961; Archives Office of New South Wales, 1961; Archives Office of Tasmania, 1965. A Business Archives Council was established in 1954 to co-ordinate activities in the field of company records and a number of firms have established their own archives services. Certain churches have also provided appropriate facilities for ecclesiastical records. Other corporate and private archives continue to be collected by several archives offices, libraries and, more recently, universities.

Commonwealth Archives Office

In 1943, following a report by an inter-departmental committee, the Prime Minister directed the formation of a War Archives Committee to arrange for the preservation of war records. This Committee recognised that war archives could not be separated from peace-time archives, and in 1946 the name was changed to the Commonwealth Archives Committee. In 1952 the National Library became the sole archival authority for the Commonwealth and the Chief Archives Officer became the Executive Officer for the Committee. In March 1961, in accordance with a recommendation of the National Library Inquiry Committee, the Archives Division of the National Library was reconstituted as the Commonwealth Archives Office within the Prime Minister's Department. The Archives Office functions, in part, as a central agency for the control of those records created by the Commonwealth Government which are no longer required for frequent use in the day-to-day business of government and which, in many cases, contribute towards the development of a unique record of the heritage of the Australian nation. As a complementary function the Office also provides services for members of the public. These functions are carried out through the following basic activities.

Records and archival management. From 1967, the Office has been responsible for a Central Information Bureau on Records and Archival Management, providing advisory and information services to agencies of the Commonwealth Government.

Registration of record series. The Office maintains the Commonwealth Register of Record Series, in which details of all Commonwealth records are entered, including those in government departments as well as archival holdings. The records of the Commonwealth are particularly varied, ranging from early Customs, Post Office, Defence, and other material transferred from the Australian Colonies and States, to records of territories now under Australian administration, in addition to those of the Commonwealth Government proper from 1901. Some papers from non-official sources are also held, such as the records of enemy firms expropriated during the two World Wars, records of the Chaplain of Norfolk Island, and papers of former Commonwealth ministers and officials.

Control of disposal. No Commonwealth records may be destroyed without the concurrence of the Chief Archivist, whose responsibility it is to safeguard broader national interests as distinct from those of the department which compiled the records. This concurrence is given as far as practicable through continuing disposal authorities which enable Commonwealth departments to destroy certain routine classes of records automatically, but records not covered by such continuing authorities are checked before destruction is authorised. Records selected for permanent preservation are assessed as having evidential or informational value to the nation. In the first category are all records documenting the democratic, constitutional, and legal basis of the Commonwealth Government; the origin, development, organisation, functions, policies, and substantive activities of Commonwealth departments; and the rights and entitlements of Australian citizens. These range from the signed copies of Acts of Parliament to duplicate certificates of naturalisation. The second category, while including many records from the first, also covers source material considered of value to researchers in social, economic, and scientific affairs (such as migrant documentation preserved for demographic purposes) and the nation's cultural and technological heritage (represented, for example, in records of copyrights and patents).

Provision of accommodation. Any records which are no longer in active use but which are considered by the originating department or by the Archives Office to warrant preservation, either permanently as national archives or temporarily for a further specified period, may be transferred to an archives repository. While in archival custody they are analysed, arranged, and described, as resources permit, by a wide variety of processes, so that the broadest range of research interests may be served by a comprehensive system of information retrieval. At 30 June 1968 the total holdings of the Archives Office throughout Australia amounted to 345,000 shelf feet of records, including 125,000 feet of permanent material, such as files, manuscripts, registers, cards, books, maps, plans, models, paintings, films, photographs, microfilms, recordings and tapes, conservatively estimated to be more than 10,000,000 items.

Regulation of access. The current policy of the Commonwealth is to designate the generality of official records created before 1 January 1923 as 'open' to public access. However, as is customary, a small number of exceptions have to be made to this rule. The examination of records for this purpose and the development of access arrangements generally are the responsibility of the Archives Office.

Provision of information. The Office provides an advisory service to enquirers, both official and public, on appropriate sources of information for particular topics including material held by the Office itself, by other Commonwealth agencies and elsewhere. Records in the custody of the Archives Office are available for use by depositing and other departments of the Commonwealth Public Service. During 1967–68 some 272,000 items were lent to departments. The Office also provides departments with special searches and information from the records in its custody (13,200 requests in 1967–68). In accordance with the Commonwealth Government's access rules, the Office also supplies information to members of the public engaged in academic or other forms of research. Records may be consulted by holders of a search ticket in the public search rooms provided and 40 public search tickets are currently valid. During 1967–68 enquiries were received from 235 researchers. There were 6,400 daily visits to archives search rooms and repositories by officials and the public, and 24,600 items were produced for consultation.

The headquarters of the Commonwealth Archives Office is in Canberra, and there are branches in Sydney, Melbourne, Brisbane, Adelaide and Perth. Regular visits are made to areas not yet served by Commonwealth Archives repositories, and in 1968 records surveys were conducted in the Northern Territory, Papua and New Guinea, Norfolk Island and Christmas Island. The Office maintains liaison with similar organisations in overseas countries and is the Australian national member of the International Council on Archives, established under the auspices of UNESCO.

Archives Office of New South Wales

Prior to 1961 the State archives were in the care of the Public Library of New South Wales, first in its Mitchell Library but from 1954 in an Archives Department. Under the *Archives Act 1960*, the Archives Authority of New South Wales was established in 1961 as a statutory corporation of nine members, appointed by the Governor, to have the custody and control of the State archives. These are preserved in the Archives Office of New South Wales which was also established under the Act as an office and repository for that purpose. The Principal Archivist is the chief executive officer of the Authority.

The Act requires that before any public records of the State are destroyed or disposed of, notice must be given to the Archives Authority which may then require any such records to be made available to it. Records transferred to the Authority become State archives and are generally 'open' when 35 years old, to holders of a reader's ticket.

The State archives at 31 December 1968 occupied 30,816 feet of shelving. This excludes more than 16,000 maps and plans besides other records which can not be readily measured statistically. In addition there were about 100,000 feet of permanently valuable records housed mainly in the Government Records Repository.

Archives Office of Tasmania

The Archives Office of Tasmania operates under the *Archives Act 1965, No.* 47. The statutory authority under the Act is the Tasmanian Library Board. No records of state and local authorities may be destroyed or otherwise disposed of except on the written authority of the Principal Archivist. A survey of Tasmanian records is concentrating at present on municipal councils and local courts.

The holdings of the Archives Office amount to about 10,000 feet (including non-public records) housed in part in the State Library building completed in 1962 and in part in the vaults beneath the nineteenth century Public Buildings, Franklin Square. On the completion (probably in 1971) of the second phase of the State Library Building the archives will be accommodated in the tower block. The storage space will be air conditioned and will provide an ideal environment for records.

A publication programme has produced three parts of a Guide to the Public Records of Tasmania and five further record groups are being inventoried with a view to producing additional publications.

A file lending service is conducted for the benefit of departments and authorities which have deposited semi-current records in the Archives Office. Research workers have access to records in the search room and a mail reference service is provided for country and interstate enquirers.

Business Archives Council of Australia

The Business Archives Council of Australia (New South Wales Branch) was established in 1954 to promote activity in the field of business records. A Victorian branch of the Council was established in 1957. Both branches work for the preservation of business records and promote the writing of business history. The Council itself does not collect business records. The main collecting centres are the Archives of the University of Melbourne, The Australian National University and the University of Sydney. Melbourne and the Australian National University hold the largest collections of business records in the British Commonwealth.

The University of New England also collects business records. Whereas the collections at Melbourne and the A.N.U. span a wide range of business activity, New England concentrates on rural industries. In addition, Melbourne holds a strong collection of legal records, and the A.N.U. a strong collection of trade union records.

Museums and art galleries

In 1964 an annual collection of statistics on a uniform basis was commenced from Australian museums and art galleries. The following paragraphs provide summarised results of the collection and refer individually to the more important museums and art galleries.

A museum or art gallery is considered to be a building, group of buildings or parts of buildings. managed as a unit and intended predominantly for the permanent display of objects of interest (museum) or objects of art (art galleries) to the general public. Institutions displaying live exhibits are excluded (the more important of these are mentioned on pages 549–50), as are buildings used for temporary displays (exhibitions, commercial galleries exhibiting only for sale) without a permanent stock of exhibits; permanent exhibitions which are ancillary to other activities such as exhibits at council chambers, libraries, hotels, and other commercial enterprises providing services to tourists and sightseers; collections which are not readily accessible to the general public, such as university collections for the use of students and research workers; and historic homes, etc. not specifically intended for the permanent display of objects of interest (i.e. where the building itself and its normal fittings are essentially on display).

Museums and art galleries, 1968

The following table classifies by States and Territories and by ownership the institutions in Australia which have been identified in 1968 as museums and art galleries (branches of museums and art galleries are not shown separately).

MUSEUMS AND ART GALLERIES: STATES AND A.C.T., AND OWNERSHIP, 1968
(Number)

	Major institutions			*Other institutions*			
	Museums	*Art galleries*	*Mixed institutions*	*Museums*	*Art galleries*	*Mixed institutions*	*All institutions*
State or Territory—							
New South Wales	3	1	..	4	3	2	13
Victoria	2	1	..	2	5	2	12
Queensland	1	1	..	..	3	..	5
South Australia	1	1	..	6	1	..	9
Western Australia	1	1	..	2	1	..	5
Tasmania	..	..	2	..	..	..	2
Northern Territory	..	..	..	..	..	..	..
Australian Capital Territory	1	..	1	1	..	..	3
Ownership—							
Commonwealth Government	1	..	1	..	..	..	2
State Governments	8	5	1	3	..	1	18
Municipal authorities	..	..	1	4	6	1	12
Private trusts	..	..	..	2	5	1	8
Universities	..	..	..	1	1	1	3
Private	..	..	..	5	1	..	6
Total museums and art galleries	**9**	**5**	**3**	**15**	**13**	**4**	**49**

The following table sets out particulars of staff, display areas and expenditure for all museums and art galleries identified in 1968.

MUSEUMS AND ART GALLERIES: STAFF, DISPLAY AREA, ATTENDANCE, AND EXPENDITURE, STATES AND A.C.T., 1968

		N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*A.C.T.*	*Aust.*
Total staff—									
Museums		177	146	32	78	55	..	19	507
Art galleries		52	173	21	36	20	..	..	302
Mixed institutions		17	9	..	..	..	48	67	141
All institutions		*246*	*328*	*53*	*114*	*75*	*48*	*86*	*950*
Display area used—									
Museums	'000 sq ft	105	71	28	57	12	..	11	284
Art galleries	" "	51	86	20	33	12	..	..	202
Mixed institutions	" "	13	13	..	..	..	77	80	183
All institutions	" "	*169*	*170*	*48*	*90*	*24*	*77*	*91*	*669*
Estimated attendance during year—									
Museums	'000	694	735	139	266	178	..	180	2,192
Art galleries	"	403	509	145	147	118	..	..	1,322
Mixed institutions	"	63	65	..	..	..	161	525	814
All institutions	"	*1,160*	*1,309*	*284*	*413*	*296*	*161*	*705*	*4,328*
Estimated expenditure during year(*a*)—									
Museums	$'000	615	433	126	236	244	..	60	1,714
Art galleries	"	182	302	99	170	128	..	..	881
Mixed institutions	"	60	50	..	..	..	187	358	655
All institutions	"	*857*	*785*	*225*	*406*	*372*	*187*	*418*	*3,250*

(*a*) Excludes certain funds not controlled by the institution, for which information is not available.

The following table gives figures for staff, display area, etc., for each of the seventeen institutions identified in 1968 as major because of the size of their exhibits, their popularity and the extent of the information and investigation services they provide.

MUSEUMS AND ART GALLERIES, MAJOR INSTITUTIONS: OWNERSHIP, STAFF. DISPLAY AREA, ATTENDANCE, ETC., 1968

		Australian War Memorial, Canberra	*Australian Institute of Anatomy, Canberra*	*Australian Museum, Sydney*	*Museum of Applied Arts and Sciences, Sydney(a)*	*Geological and Mining Museum, Sydney*	*Art Gallery of N.S.W., Sydney*	*National Museum of Victoria, Melbourne*	*Institute of Applied Science of Victoria, Melbourne*	*National Gallery of Victoria Melbourne*
Ownership		Cwlth	Cwlth	State	State	State	State	State	State	State
Staff—										
Scientific, professional, teaching, preparational		8	10	39	27	10	11	55	59	41
Administrative and clerical, attendants, cleaners, other		59	7	46	35	12	29	19	9	117
Total staff		*67*	*17*	*85*	*62*	*22*	*40*	*74*	*68*	*158*
Display area used	'000 sq ft	80	9	51	29	11	40	41	26	44
Annual attendance	'000	525	175	n.a.	246	32	(*b*)350	n.a.	395	378
Number of lectures		53	..	626	4,952	89	133	(*b*)300	1,125	202
Total attendance at lectures	'000	1	..	35	75	4	4	12	65	9
Field-work	man-days	..	..	950	138	44	..	288	8	..
Books, periodicals, etc. in library	'000	78	7	36	8	..	5	n.a.	4	n.a.

		Queensland Museum, Brisbane	*Queensland Art Gallery, Brisbane*	*South Australian Museum, Adelaide*	*National Gallery of South Australia, Adelaide*	*Western Australian Museum, Perth*	*Western Australian Art Gallery, Perth*	*Tasmanian Museum and Art Gallery, Hobart*	*Queen Victoria Museum and Art Gallery, Launceston*
Ownership		State	State	State	State	State	State	State	Municipal
Staff—									
Scientific, professional, teaching, preparational		11	3	35	8	17	9	7	8
Administrative and clerical, attendants, cleaners, other		21	13	21	17	33	10	18	15
Total staff		*32*	*16*	*56*	*25*	*50*	*19*	*25*	*23*
Display area used	'000 sq ft	28	7	41	28	7	9	41	36
Annual attendance	'000	139	125	195	119	143	109	(*b*)90	71
Number of lectures		186	..	148	103	351	27	n.a.	189
Total attendance at lectures	'000	10	..	5	6	13	1	n.a.	4
Field-work	man-days	102	..	300	..	741	..	120	40
Books, periodicals, etc. in library	'000	39	1	26	n.a.	11	1	..	12

(*a*) Includes branches at Albury, Bathurst, Broken Hill and Goulburn. (*b*) Estimated.

Some descriptive detail follows in respect of the seventeen major institutions listed in the foregoing table.

Australian Capital Territory

The Australian War Memorial, Canberra. The memorial comprises the national collection of war relics and the building in which these are preserved. The building was opened in 1941. The memorial is administered by a director responsible to a board of twelve trustees.There is a collection of 4,000 art works and a museum collection of more than 40,000 war relics, the gathering of which began on the battlefields of the 1914–18 War and was continued during the subsequent campaigns in which Australian forces have participated. The collection has been enhanced by gifts of relics from the governments of Great Britain, the sister dominions and allied countries, and also by presentations made by ex-servicemen and relatives of those who died. The collection consists of items such as tanks, aeroplanes, submarines, field-guns, boats, and the widest possible range of war trophies down to the smallest items, each relic dependent for its value on its historical background. The works of art, all by Australian artists, depict battle scenes, individual officers and men, etc., and include oil and water colour paintings, drawings, statuary, bronzes, dioramas, and mosaics. There is also a library, which is described on page 535.

The Australian Institute of Anatomy, Canberra. The Institute is described in the chapter Public Health, page 470. It contains displays of biological and anatomical aspects of man and the anatomy of Australian animals. A display of Aboriginal and Melanesian artefacts from the National Ethnographic Collections is temporarily housed in the Institute.

New South Wales

The Australian Museum, Sydney. Founded in 1836, this is the oldest museum in Australia. It is administered by a director and a board of twenty-five trustees as a government department attached to the New South Wales Department of Education. It has fine collections of all groups of animal, including insect, fossils as well as mineral and ethnological collections, particularly in relation to Australia and the Pacific.

Museum of Applied Arts and Sciences, Sydney. This museum, with branches at Bathurst, Goulburn, Broken Hill, and Albury, is administered by a director and a board of seven trustees appointed by the Governor of New South Wales. The museum specialises in applied arts (ceramics, glass, oriental arts, costumes, musical instruments, furniture, etc.), applied science and technology (engineering, transport, textiles, electronics, etc.), and among its special features are a Watt beam engine of 1785, No. 1 New South Wales locomotive, Lawrence Hargrave models, colour television, and a planetarium.

Geological and Mining Museum, Sydney. This museum is administered as a branch of the Department of Mines by a curator under the control of the Director, Geological Survey of New South Wales. The display contains a unique collection of ores and economic minerals from New South Wales with material from the other States and from overseas for comparison. Its most important functions are the identification of mineral and rock specimens, several thousands of which are received annually, and the supply of some 20,000 to 30,000 specimens free of charge to schools.

Art Gallery of New South Wales, Sydney. The Gallery originated in the Academy of Art founded in 1871. It is administered by a director and secretary under a board of thirteen trustees responsible to the New South Wales Minister for Education. The gallery has over 8,000 exhibits, including nearly 1,700 oils and 170 pieces of sculpture. Australian art and modern European painting and sculpture are featured. An Aboriginal art collection includes a unique set of large Melville Island graveposts. Assistance is provided to governments and private organisations in the design of books, coins, notes, etc., the preparation and judging of exhibitions, and the supply of research material and information.

Victoria

National Museum of Victoria, Melbourne. The museum was founded in 1854. It is administered by a director and board of seven trustees. It houses substantial collections in the fields of zoology, geology and anthropology. There is a small branch at Tidal River, Victoria.

Institute of Applied Science of Victoria, Melbourne. The Institute was founded in 1870. It is administered by a director and board of seven trustees. Its collections are concerned with aspects of application of all science subjects, but with special emphasis on engineering, transport, astronomy, physics, biology, public health, arms and agriculture. The Institute has a planetarium, an observatory and a radiocarbon dating laboratory.

National Gallery of Victoria, Melbourne. The gallery is administered by a director and board of nine trustees. Its large collections of over 20,000 items feature paintings by Rembrandt, Tiepolo and the Flemish primitives, Dürer engravings, Blake drawings, and English 18th century furniture.

In the first half of 1968 the National Gallery occupied its new building in the Victorian Arts Centre. The new Gallery was opened to the public in August of that year.

Queensland

Queensland Museum, Brisbane. The museum, founded in 1855, is the State Museum of Natural Science. It is administered by a director as a sub-department of the Queensland Department of Education. The collections are in the fields of the natural sciences, ethnology and history, and include extensive collections of fossil vertebrates.

Queensland Art Gallery, Brisbane. This gallery was established in 1895. It is administered by a director and board of thirteen trustees. The gallery especially features Australian art of all periods, British modern art, French sculpture, and French paintings from the Rubin collection. The Art Gallery has 1,859 display items, including 573 oils.

South Australia

The South Australian Museum, Adelaide. The museum is a department of the South Australian Public Service and is administered by a director and board of five trustees. It features natural science and anthropological collections. The latter refer to the Australasian and Pacific regions and include an outstanding collection of Aboriginal artefacts.

National Gallery of South Australia, Adelaide. The gallery originated in 1881. It is administered by a director and board of seven trustees. Apart from the usual art gallery collections, devoted chiefly to British and Australian works, it features a large collection of prints containing examples from European, British, Oriental, and Australian schools, and a numismatic collection which is widely regarded as the finest in Australia. It also contains the South Australian Historical Collection and a small collection of weapons. It has 56,996 exhibits, including 2,132 oils and watercolours, and 12,144 engravings and prints.

Western Australia

Western Australian Museum, Perth. The museum was established in 1895. It is administered by a director and board of five trustees appointed by the Western Australian Government. The zoological collections cover all vertebrate and most invertebrate fields, particularly marine. There are collections relating to vertebrate palaeontology and meteorites, fossil invertebrates, and some fossil plants. There are extensive collections of Aboriginal artefacts and European arms and armour.

The Western Australian Art Gallery, Perth. The gallery was established in 1895 and is administered by a director and government-appointed board of five trustees. It features especially collections of Australian paintings, drawings, ceramics and sculpture, a fine collection of Australian contemporary art, and a major Henry Moore sculpture. It has collections of coins and of Western Australian stamps. Altogether there are 3,698 items, including 464 oils and 51 pieces of sculpture.

Tasmania

Tasmanian Museum and Art Gallery, Hobart. Opened in 1887, the Tasmanian Museum and Art Gallery is administered by a board of seven trustees. It has a branch at Zeehan, namely the West Coast Pioneers' Memorial Museum. The museum part contains zoological, anthropological and geological displays relating to Tasmania and special displays relating to Tasmanian Aborigines and Macquarie Island. The art displays contain an excellent holding of Tasmanian historical works.

Queen Victoria Museum and Art Gallery, Launceston. This institution, opened in 1891, is owned and administered by the Launceston City Council through a director and a sub-committee of aldermen. It has a branch at Cradle Mountain. Attention is concentrated on collections relating to the natural, biological and historical environment of Tasmania, featuring Tasmanian fauna, Aboriginal relics and historical material. The arts associated with Tasmania are represented by an excellent collection of early colonial period painting and also by a fine collection of costumes, lace and ceramics.

Other museums and art galleries

A short description of some of the thirty remaining museums and art galleries is given in the following paragraphs. The institutions are grouped into those owned by the States, by municipalities and private trusts, by universities, and by private persons.

State-owned institutions. The Dixson and Mitchell Libraries (sections of the Public Library of New South Wales) have galleries in which paintings, drawings, engravings, photographs, coins and postage stamps, all related to Australian and south-west Pacific history, are exhibited. The main area of display comprises 7,051 square feet. Only a fraction of the many thousands of items can be shown. There is a geological museum, maintained by the Victorian State Mines Department, with a comprehensive collection of geological specimens. In South Australia there is a small museum of local and tourist interest—the Old Government House, Belair, displaying furniture, etc. of the colonial era.

Municipal and private trust institutions. In addition to the Queen Victoria Museum and Art Gallery in Launceston, eleven institutions are owned by local government authorities throughout Australia, one of which, in Warrnambool, Victoria, is closed pending construction of new premises. The largest of them are the Newcastle Art Gallery in New South Wales and the Museum and Art Gallery at the Mildura Arts Centre in Victoria. Institutions are also maintained in major provincial cities by private trusts. These and the municipal institutions often exhibit artistic, historical and other items of special local interest, and as a rule there are associated with them various local societies devoted to the exploration and encouragement of the arts, local history and the like. Thus the Lionel Lindsay Art Gallery and Library at Toowoomba, Queensland, is administered by a board of trustees, originally appointed in 1959 by deed of trust.

University institutions. Most university collections, some of them comprehensive and containing unique material, are reserved essentially for the use of students and research workers, and are therefore not included as museums or art galleries. However, the John Darnell Art Gallery of the University of Queensland, originating from a bequest in 1930, the Macleay Museum of Natural History at the University of Sydney, stemming from a gift to the university in 1888, and the Nicholson Museum of Antiquities at the University of Sydney are open to the public.

Private museums and art galleries. Only six establishments of this nature are included here as museums or art galleries. Five are in South Australia and one in the Australian Capital Territory.

Botanical and zoological gardens

In addition to the zoological gardens referred to in the following paragraphs there are numerous privately owned zoos and sanctuaries, many of them at tourist resorts, which maintain collections of Australian flora and fauna. There are also various national parks, forests, reserves, etc., dedicated for public use, which are preserved largely in their natural condition.

New South Wales

The Sydney Botanic Gardens are situated on the shores of Farm Cove, Sydney Harbour, close to the heart of the city and on the site of the first farm established in 1788 by Governor Phillip. Now occupying sixty-six acres, they contain a large and varied collection of flowering plants, shrubs and trees as well as hothouses of orchids and ferns.

The Zoological Gardens at Taronga Park, on the northern side of Sydney Harbour, were opened in 1916. The area is about seventy acres. The natural formation has been retained as far as practicable, with the object of displaying the animals in natural surroundings, and an aquarium has been built within the gardens. In 1967–68 admissions to the grounds were 883,262 and to the aquarium 324,464. The receipts of the zoological department of the Taronga Park Trust amounted to $494,156 in 1967–68, excluding an annual State grant of $50,000, and expenditure amounted to $493,101. Exhibits at 30 June 1968 comprised 1,010 mammals, 2,746 birds, 261 reptiles, and 1,085 fish.

Victoria

The main botanical gardens in the State are the Royal Botanic Gardens, an area of eighty-eight acres within one mile of the centre of the City of Melbourne, containing over 12,000 species of plants, of which there are some 30,000 individual specimens. Many species of native birds breed on islands in lakes within the gardens.

The Zoological Gardens are situated in Royal Park, and contain a wide selection of animals, birds and reptiles. A wild life sanctuary is also maintained at Healesville.

Queensland

Botanical gardens have been established in Brisbane and in several other cities. The Brisbane Botanic Gardens were established in 1855 by the Government of New South Wales. In 1925 the Queensland Government transferred them to the Brisbane City Council. They occupy approximately forty-six acres on the banks of the Brisbane River in the central city area and are noted for their collections of palms, tropical trees and shrubs, and succulents; they contain over 7,500 species.

South Australia

The Botanic Garden was established in 1855 and opened to the public in 1857. It covers forty-five acres, on which are established collections of Australian and exotic plants from low rainfall and sub-tropical regions. In a large range of glasshouses are collections of tropical, ornamental, and economic plants. Special collections include cacti and succulents, bromeliads, and begonias. An up-to-date and comprehensive botanical and horticultural library is maintained.

Mount Lofty Botanic Garden, of approximately 180 acres, was established in 1960 and is to be opened to the public in the early 1970s.

The State Herbarium was established in 1952 and moved to the present building in 1965. It contains about 250,000 specimens.

The Zoological Gardens, opened in 1883, have an area of approximately 19 acres, and contain a fine collection of animals, reptiles, and birds.

Western Australia

A botanic garden and arboretum for the native plants of Western Australia were commenced in 1962 and officially opened in October 1965. The site of this development is in King's Park, a reserve of almost 1,000 acres close to the centre of Perth. The Botanic Garden is the counterpart of the Museum in the botanical field, maintaining living collections of plants for scientific and educational purposes. The West Australian collections at present comprise a total of 1,200 species of trees and wildflowers. Virtually all trees native to the southern half of the State, with the exception of some rare mallees, are represented in the arboretum.

Parties from the Botanic Garden are regularly in the field for the collection of propagating material and contribute to the botanical exploration of the State. Special attention is devoted to locating rare species or species threatened with extinction. Vegetation maps of the State are being built up. Seed of native plants collected is distributed to botanical institutions throughout the world and to private growers and nurserymen. A seed list which normally offers from 900 to 1,000 species is published annually. In 1967–68 almost 5,000 packets of seed were distributed.

Research on propagation of native plants is carried on in the nursery and information acquired is passed on to growers through State branches of the Society for Growing Australian Plants, using the medium of the Society's journal. Within Western Australia members of the staff regularly lecture and demonstrate, and the nursery is open to conducted parties at regular intervals. Official guides may be engaged by parties of visitors, and as the Botanic Garden develops it is designed to become of value for nature study groups. A Wildflower Exhibition is held in the Park each spring. Facilities are provided for the employment and ancillary training of students enrolled in the three-year course for the Western Australian Certificate of Horticulture and Park Administration.

The Zoological Gardens, which were opened in 1898 at South Perth, have an area of 44 acres and are under the control of the Acclimatisation Committee. Animals, birds and reptiles are exhibited. During the year 1967–68, 190,952 adults and 171,101 children visited the zoo.

Tasmania

The Royal Tasmanian Botanical Gardens adjoining Government House on the Queen's Domain contain a fine collection of exotic trees and shrubs and a small aviary. The gardens are controlled by a board appointed by the State Government, which supports the gardens by annual grants.

There are two privately owned wildlife sanctuaries and zoos, each with a few exotic animals. One is at Granton near Hobart, the other is at Punch Bowl near Launceston. The Launceston City Council keeps a small collection of animals and birds at City Park.

Northern Territory

The Darwin Botanical Gardens were established in 1873 and were planted with exotic plants and trees. The gardens now occupy eighty acres and feature tropical plants of both native and overseas origin. They are controlled by the Darwin City Council.

Australian Capital Territory

The Canberra Botanic Gardens have been under development on the lower slopes of Black Mountain since 1950. The gardens are on a 100-acre site and are being developed by the Department of the Interior for the study of the botany, propagation, and cultivation of Australian native plants with the aim of promoting scientific and educational interest in these plants. The gardens were opened for public inspection in 1967 and will be officially opened in 1970.

Book publishing

Australian book publishing

Statistics about Australian book publishing are prepared from data supplied by the National Library of Australia (*see* page 533). Through the deposit provisions of the *Copyright Act* 1912–1966, its overseas collection agents and its own efforts, the National Library receives practically all books and pamphlets published in Australia (including the External Territories), although not necessarily in the year of publication. Where the statistics compiled and shown hereunder are classified according to the year of publication, the figures are subject to revision as publications come to hand subsequent to the year of publication.

The method of counting conforms with international practice. Each title is counted as one unit. The figures cover all non-periodical publications published in Australia. They refer to all publications of five pages or more and include pamphlets, new translations and re-editions. They include government publications, educational textbooks, published university theses, etc., but exclude publications not available to the general public, advertising material, publications of transitory interest, musical works, and maps and charts.

Number of publications

The first table following shows the number of books and pamphlets published in Australia during the years 1964 to 1968 and *cumulative* number received by the National Library, and the second table the number published during the years 1964 to 1968 classified according to State or Territory of publication.

NUMBER OF AUSTRALIAN PUBLICATIONS (1964 TO 1968) RECEIVED BY THE NATIONAL LIBRARY

Received by the National Library to the end of—	*Published during—* 1964	1965	1966	1967	1968
1964	1,385	..	..	..	..
1965	1,934	2,039	..	..	..
1966	2,117	3,180	1,712	..	..
1967	2,123	3,306	2,659	2,339	..
1968	2,123	3,306	(*a*)2,744	(*a*)3,038	(*a*)2,646

(*a*) Incomplete—*see* text in first paragraph of section.

NUMBER OF AUSTRALIAN PUBLICATIONS (1964 TO 1968) RECEIVED BY THE NATIONAL LIBRARY, BY STATE OR TERRITORY OF PUBLICATION

	Published during—				
State or Territory	*1964*	*1965*	*1966* (*a*)	*1967* (*a*)	*1968* (*a*)
New South Wales	723	1,263	1,203	1,216	1,004
Victoria	539	710	603	782	726
Queensland	208	286	183	195	213
South Australia	146	252	163	211	181
Western Australia	105	168	63	113	139
Tasmania	59	98	48	51	42
Northern Territory	9	19	9	7	4
Australian Capital Territory	313	478	447	420	316
Papua-New Guinea	21	30	20	35	21
Nauru	..	2	5	8	..
Total	**2,123**	**3,306**	**2,744**	**3,038**	**2,646**

(*a*) Incomplete—*see* text in first paragraph of section.

The next table shows the numbers of books and pamphlets published during the years 1964 to 1968 and received by the National Library, classified by subject-matter.

NUMBER OF AUSTRALIAN PUBLICATIONS (1964 TO 1968) RECEIVED BY THE NATIONAL LIBRARY, BY SUBJECT-MATTER(a): AUSTRALIA

Subject-matter	*Published during—* *1964*	*1965*	*1966 (b)*	*1967 (b)*	*1968 (b)*
Bibliography, libraries, general	42	101	111	103	75
Philosophy, psychology	18	23	19	15	22
Religion	78	117	65	83	62
Social sciences	775	1,233	954	1,257	1,023
Philology	32	45	64	48	43
Science	215	302	282	271	237
Technology, business	428	607	475	502	426
Art, amusement	115	142	174	140	159
Literature—					
Criticism, anthologies, school editions	20	137	45	17	16
Australian poetry	33	29	34	46	48
Australian drama	22	5	4	4	3
Australian fiction	156	236	186	195	158
Australian essays	4	2	3	..	1
Australian humour and miscellany	3	12	9	14	8
Other literature	20	21	72	93	89
Total, literature	*258*	*442*	*353*	*369*	*323*
Travel, biography, history	162	294	247	250	276
Total	2,123	3,306	2,744	3,038	2,646

(a) The classification is based on the divisions of the Dewey Decimal Classification. (b) Incomplete—*see* text in first paragraph of section.

Commonwealth Literary Fund

In 1908 the Commonwealth Government, under Alfred Deakin, first established the Commonwealth Literary Fund. The Fund was entirely a compassionate one devoted to literary pensions for aged or infirm authors, for the families of literary men who died in poverty, and for writers who were unable for financial reasons to continue their activities.

In 1939, in an endeavour to encourage the development of Australian literature and to foster appreciation of it, the Commonwealth Government greatly enlarged the scope of the Fund. The Fund now awards fellowships each year, assists in the publication of manuscripts of high literary merit, makes annual grants for lectures in Australian literature, and awards pensions to writers who have achieved a nation-wide reputation for their work in the field of creative literature. The fellowships are awarded each year to writers who have proved their capacity in the field of creative literature and to writers of promise, to enable them to devote their time to working on a literary project they specify. A fellowship carries a maximum value of $6,000 a year. The Fund does not seek out people on whom to bestow fellowships, but considers only those who submit applications.

The Fund also assists in the publication of manuscripts which have outstanding literary merit, but which, in the opinion of publishers, may constitute a commercial risk. This assistance takes the form of a guarantee of assistance to the publisher. The Fund does not itself enter the field of publishing, nor does it make outright grants to authors to enable them to arrange publication.

From 1940 to 1965 the Fund made grants to universities for special lectures in Australian literature. In 1940, with rare exceptions, universities ignored Australian writing, but by 1964 the majority of them were actively engaged in its study, and Australian literature had become an accepted field of university scholarship. The Commonwealth Literary Fund lectures played an important role in stimulating interest in Australian literature. At present universities may apply for a grant to enable lectures to be given on special occasions.

In 1956 the Fund initiated a scheme of lectures to the general public and to schools, mainly in country areas, with the co-operation of State adult education authorities and Education Departments. All States receive grants for this purpose. The Fund also assists certain literary magazines of recognised literary value.

The Fund is administered by a committee consisting of one representative of each of the three main political parties in the Parliament, the chairman being the Prime Minister. The committee is advised on all literary matters by an advisory board of six persons with literary qualifications.

Commonwealth assistance to Australian composers

In 1967 the Commonwealth Government appointed an advisory board to advise it on projects to encourage Australian composers. The purpose of Commonwealth aid in this field is to assist any project which will facilitate the performance of Australian compositions and to promote a better understanding of Australian music, thereby improving the status of Australian composers.

National Literature Board of Review

On 1 January 1968 the Commonwealth Government introduced legislation to provide for a National Literature Board of Review of nine members. The Board replaced the Commonwealth Literature Censorship Board and Appeal Board, both of which were advisers to the Commonwealth only in respect of imported literature. A brief history of these Boards appears in Year Book No. 53, page 646.

The National Literature Board of Review was established following Commonwealth–State agreement in 1967, to achieve uniformity in the administration of laws relating to blasphemous, indecent or obscene publications of *prima facie* literary, artistic or scientific merit. In terms of the Agreement the Board is established under the Customs (National Literature Board of Review) Regulations. Appropriate Ministers of any State may, under the Agreement, refer works published or distributed locally to the Board for advice. Subject to retention of final responsibility by each Minister it is the intention of the Governments concerned not to act against a publication of merit which the Board advises is suitable for distribution in Australia.

Film production

Australian film production

Australia was one of the pioneers in the history of film-making, *Soldiers of the Cross*, a multi-reel story film, having been made in 1900, three years before America's *The Great Train Robbery*, which is generally considered to be the first genuine story-film. It has been claimed that *The Kelly Gang*, made in 1905–6, was the first full-length feature film produced in the world. Following the outbreak of the 1914–18 War a series of short patriotic films was produced. In 1917 the first of a successful series of rural comedies was made, featuring a family called the Hayseeds. In the same year *The Kelly Gang* was remade and the first film version of *For the Term of His Natural Life* appeared. A first film version of C. J. Dennis's *The Sentimental Bloke* was made in 1919.

The year 1920 was notable for a number of productions with an authentic Australian flavour: *On Our Selection* a first version of *Robbery Under Arms*, another remake of *The Kelly Gang*, and C. J. Dennis's *Ginger Mick*. Production continued at about the same level until the coming of sound in 1928. Altogether, approximately 255 theatrical films were produced by Australian units in the silent period (1900–1930). Lack of equipment hampered the commencement of production of sound films in Australia, but during the 1930's nearly 60 sound films were produced.

During the 1939–45 War, commercial film producers combined with the Commonwealth Government in making films. Since the war, a number of British and American companies have made films in Australia. Altogether, about 140 feature films were produced in Australia between 1930 and 1968.

Australian National Film Board

The Australian National Film Board was inaugurated in April 1945, on the recommendation of a Commonwealth Government inter-departmental committee. It was attached for administrative purposes to the Department of Information. With the abolition of that Department in March 1950, administration of the Board was transferred to the News and Information Bureau, Department of the Interior.

In November 1950 the Board was reconstituted as an advisory body to the Minister for the Interior on matters concerned with the production, acquisition and distribution of films required by Commonwealth departments for use within Australia on important matters of national interest and welfare, such as school and adult education, rehabilitation, social development, international understanding, trade and tourist expansion, and immigration; and for dissemination abroad to expand trade and commerce with other countries, to encourage tourist traffic with Australia, to improve Australia's relations with other countries and, where necessary, to explain Australia's national policies, and to encourage immigration.

The constitution provides for a membership of twelve, with the Director of the News and Information Bureau as chairman and the remainder representative of Commonwealth departments, State government instrumentalities, and organisations interested in the production, distribution or utilisation of films for national publicity.

Commonwealth Film Unit

Official government film production originated with the appointment in May 1913 of a cinematographer and photographer in the Department of External Affairs. A later development was the establishment, in Melbourne in 1920, of the Cinema and Photographic Branch of the Department of Commerce, and a Government film unit has existed in one form or another to the present day. Early in the 1939–45 War the newly-established Department of Information was made responsible for the operation of the Cinema Branch and for an Official War Photography Unit. When the Australian National Film Board was established in 1945, the Film Division of the Department of Information became the official film production and distribution agency for Commonwealth departments and instrumentalities. In 1950, with the closing down of the Department of Information and the transfer of its functions, the Division became the Film Division of the News and Information Bureau then set up within the Department of the Interior. It is referred to in Australia as the Commonwealth Film Unit, and internationally as the Australian Commonwealth Film Unit. Theatrical and television distribution of Film Unit productions in Australia and overseas is organised by the Commonwealth Film Unit or its representatives at Australian official posts. Non-theatrical distribution in Australia is arranged in co-operation with State film distribution agencies, and through the National Library, Canberra.

Since 1946 the Film Unit has produced films for general exhibition, as well as training and special purpose films. In 1968–69 the Film Unit produced approximately 110 reels of new films and 150 reels of foreign versions of existing films. Prints are distributed through 70 overseas embassies and diplomatic posts. While many films are released commercially abroad, the emphasis is on distribution of educational and information films through non-theatrical circuits. Films are frequently shown on television in Europe, Asia and North America. Selected films have been recorded in most Asian and European languages and in Esperanto and Pidgin.

In addition to films made on its own initiative, the Commonwealth Film Unit produces films under the sponsorship of, or with the co-operation of, Commonwealth departments and other government instrumentalities. It competes regularly in international film festivals and has been awarded many distinctions. It also participates in other cultural events such as those surrounding the Olympic Games in Mexico and Expo '70 in Japan.

With a staff of 148, the Commonwealth Film Unit is the largest producer of documentary and information films in Australia.

Film censorship

Legislation. The Commonwealth Government's powers over censorship of films extend only to imported films and imported advertising matter, and stem from the Customs Act. Under that Act the Customs (Cinematograph Films) Regulations provide for the appointment of a Film Censorship Board whose function is to ensure that films and related advertising material coming within certain defined categories are not admitted into Australia. Under those regulations the Film Censorship Board may pass films in their original form, reject them, or pass them after eliminations have been made. Legislation passed by the State Governments of Victoria, Queensland, Western Australia, and Tasmania names the Commonwealth Film Censorship Board as the censorship authority and vests in it the power to classify films as suitable for general exhibition or not. The State Acts give the Commonwealth Board the authority to censor films made in Australia for commercial exhibition and advertising matter made in Australia.

The censorship organisation comprises a Censorship Board of seven persons and an appeal censor, the headquarters being in Sydney. Importers have a right of appeal to the Minister against decisions of the Board and the Appeal Censor.

Thirty-five mm films for exhibition in motion picture theatres. In 1968, 1,617 films comprising approximately 5.5 million feet were censored. This represented approximately 1,070 hours screening time. Of these films, 568 originated in the United Kingdom, 404 in the United States of America, and 645 in other countries. Principal suppliers among the last mentioned were: U.S.S.R. 105, Italy 79, Greece 78, France 47, Japan 33, Germany 26, Sweden 15, Poland 13, Switzerland 12 and Hungary 11. Included in these figures were 549 full-length feature films which constitute the main theatrical attractions. This was an increase of 72 over imports for 1967. Feature films mainly came from: the United States of America, 161; the United Kingdom, 85; Italy, 61; U.S.S.R., 54; France. 40; Greece, 38;

Japan, 14; and Sweden, 12. Thirty-five feature films were rejected and cuts were made from 141. There were 29 appeals, 18 against rejection, 9 against cuts and one each against classification and the rejection of advertising matter. Two appeals were allowed and 27 were disallowed.

Feature films classified as suitable for general exhibition numbered 184, and 330 were considered not suitable for children. Of the latter, 100 carried the special condition that all advertising should indicate that they were suitable only for adults. These classifications are advisory only and are designed to enable picture-goers and particularly parents to obtain a general idea of the nature of any particular film. In addition to these imported films, 172 35 mm films of 161,975 feet produced in Australia were cleared. These were mainly newsreels and documentaries intended for commercial exhibition or export.

Sixteen mm films. Excluding those imported for television use, 7,696 16 mm films of approximately 6 million feet were examined. These were films commercially produced for screening in theatrettes used by business undertakings for advertising and instructional purposes, and for screening in churches, schools, and universities. They also included home movies and a number of 16 mm theatrical features, some of the latter having been previously imported in 35 mm. Six were rejected.

Eight mm and 9.5 mm films. Approximately 240,000 feet of these small dimension type films were examined. One hundred and sixty-four films with an approximate footage of 13,000 feet were rejected.

Television films. In 1968, 7,476 films, all 16 mm, of approximately 10 million feet, for use on television, were censored. The number of films is not a true indication of volume because many of these were of short duration. In terms of screening time the films censored for television amounted to approximately 4,670 hours. On a footage basis the United States of America supplied 70 per cent of the total imports and the United Kingdom 19 per cent. Thirty-four television films were rejected outright and an additional 38 were classified as unsuitable for televising. Eliminations were made from 933. There were 21 appeals, 7 against rejection and 14 against classification, of which 6 were allowed and 15 disallowed.

Foreign language films. Countries other than the United Kingdom and the United States of America supplied 645 of the 35 mm films imported for theatrical exhibition, of which 303 were feature films. Generally, the dialogue is in a foreign language with explanatory English captions. A few have an English commentary and in some cases English 'dubbed' dialogue. Of 7,696 16 mm commercial films censored, 1,674 originated from non-English speaking countries. The chief supplying countries were: France, 399; Germany, 269; Japan, 193; Italy, 89; Czechoslovakia, 75; Switzerland, 71; Israel, 69; U.S.S.R., 60; Sweden, 51; Holland, 47; Belgium, 37; India, 31; Denmark, 26.

Export of films. The quantity of films exported for the year was approximately 2.5 million feet, consisting mainly of newsreels, advertising films and documentaries. This footage included in many cases several prints of the one film. It also included large quantities of exposed negatives sent overseas for processing.

Cultural organisations

Arts Council of Australia

Patterned on the Council for the Encouragement of Music and Arts which operated in the United Kingdom during the Second World War, an Australian organisation was brought into being in 1943. In 1945 it became The Arts Council of Australia. Originating in New South Wales, divisions are active now in the Australian Capital Territory, New South Wales, Northern Territory, Queensland, South Australia, and Tasmania. The New South Wales Division has over 50 branches, Queensland has over 40, South Australia 12 and Tasmania 8. A Federal Council was re-formed in 1964 and received financial assistance from the Australian Council for the Arts in 1969.

The Arts Council Divisions receive State Government grants through the Departments of Education in New South Wales, Queensland and South Australia. From 1963 to 1966 substantial contributions were received from a private organisation. Some activities of the Council are supported financially by non-metropolitan local government bodies, and grants were made by the Gulbenkian Foundation in 1964 to 1966 to help re-establish the Federal Council. The New South Wales Division is represented on the Adult Education Advisory Board in that State, representing the 'live art' section of adult education, and on the Music Committee of UNESCO. The Tasmanian Division is represented on, and works closely with, the Adult Education Board of that State.

Activities of the Arts Council are directed towards decentralisation of the arts for the benefit of country centres and metropolitan and country schools. It is greatly concerned with taking the arts to children as a basic cultural development. Tours of high standard companies in opera, ballet, drama, puppets, etc. are operating throughout the year. The Arts Council works closely with the Australian Ballet, the Trust Opera and the Old Tote Theatre Company in organising country tours for these bodies.

The Council handles a wide range of art exhibitions, both for city and country areas. Summer schools and other courses for drama, painting, pottery, music, and other arts are an established feature of the work of the New South Wales and Queensland Divisions, as are weekend schools of drama, music, painting and pottery.

Yearly drama festivals are conducted. In 1965 the New South Wales Division sponsored the first arts festivals for Sydney (North Side Arts Festival), with a wide range of cultural activities concentrated on the north side of Sydney Harbour. The festival is now a biennial event with the fourth festival being planned for August 1969. Also in 1965 the Queensland Division of the Arts Council organised a Summer School of the Arts which has become an annual event.

School tours are organised, particularly in New South Wales, where over 450,000 school children saw live performances in 1968, and in Queensland over 186,000 children attended live performances.

Australian Elizabethan Theatre Trust

Inaugurated in 1954 to commemorate the first visit to the Commonwealth of Her Majesty the Queen, the Australian Elizabethan Theatre Trust has since presented drama, opera, ballet and puppetry throughout the Commonwealth. The Trust receives annual grants from the Commonwealth Government, the State Governments and city councils. Its income also includes subscriptions from members and donations from business houses.

In the field of drama it has presented, *inter alia*, about 35 works of Australian playwrights, including plays which were subsequently presented overseas. The Elizabethan Trust Opera Company has given seasons of opera and has presented overseas guest artists, conductors and producers. From 1956 to the end of 1968 more than 1,400 performances of opera have been given by the Trust Opera Company in all States and the Australian Capital Territory. Thirty-four operas have been the repertoire in this period. The Australian Ballet, which commenced its inaugural season in November 1962, has visited all mainland capitals and New Zealand and has presented world premiere productions of seven commissioned ballets since 1964. The Commonwealth Government gave financial assistance for the Ballet to represent Australia at the Commonwealth Festival of Arts in Britain in 1965. The company also danced at Baalbek, Nice, Paris, Berlin, Copenhagen and Honolulu. It toured New Zealand, Canada and major Latin American cities during 1967 and a number of Asian countries during 1968. The Trust has also been associated with commercial managements in the presentation of overseas attractions and large-scale musicals.

In 1965 the Trust and Arts Council of Australia jointly formed the Marionette Theatre of Australia to promote puppetry, and one puppet company with sponsorship from the Department of External Affairs completed a twelve-nation tour of Asia during 1966–67.

Country areas have been visited by Trust companies presenting opera, drama, ballet and puppetry, in association with the Council of Adult Education in Victoria and the Arts Council of Australia. Each year a number of special companies present Shakespeare and other curricular plays for schools in all States, similar work having been undertaken annually since 1958. Units of singers and dancers perform a similar educational function in bringing opera and ballet to school audiences.

In Victoria the Trust is associated with the University of Melbourne in the Melbourne Theatre Company (formerly known as the Union Theatre Repertory Company). It is also associated with the University of New South Wales Drama Foundation in the Old Tote Theatre Company. The corresponding activity in Adelaide, the South Australian Theatre Company, was introduced by the Trust in 1965. Assistance is given to the Adelaide Festival of Arts, the Festival of Perth, the Perth Playhouse, the National Theatre and Fine Arts Society of Tasmania, and other companies. From a special commissioning fund the Trust commissions theatrical works in all major forms from Australian creative artists.

An important activity of the Trust is its association with the University of New South Wales and the Australian Broadcasting Commission in maintaining the National Institute of Dramatic Art, which they jointly established. This provides a training ground for young Australian actors, producers and technicians. Performing a similar function for selected ballet students, the Australian Ballet School is maintained by the Trust in Melbourne.

Australian Council of National Trusts

The Australian National Trusts were founded to further the general objectives of preservation and conservation of lands, places, buildings, works, and articles which are of national importance by reason of educational, aesthetic, historic, architectural, artistic, scientific, cultural, or other special interest.

The first Australian National Trust, the National Trust of Australia (New South Wales), was formed in 1945. Since then National Trusts have been formed in each of the other States. The Trusts in New South Wales, Queensland, South Australia, and Western Australia have statutory authority, and those in Victoria and Tasmania are incorporated under the Companies Acts of their respective States. The Australian Council of National Trusts was incorporated in 1965 to co-ordinate the activities of the State National Trusts and represent them at the federal level and internationally.

Membership of the National Trusts is open to all individuals and organisations. Total membership throughout the Commonwealth is approximately 24,000. The Trusts are financed by members' subscriptions and donations from individuals and commercial and industrial organisations, the proceeds of charges for entry to Trust properties and the fund-raising activities of members, including inspections of historic houses. In some States the Trusts are subsidised by the State Governments.

The number of properties owned or controlled by the Trusts exceeds sixty. These include houses, natural reserves, a powder magazine, a police station, two paddle steamers and a hulk, a joss house, and a garden. The Trusts have also established a register of buildings (totalling several thousand) including public buildings, churches and buildings in private ownership which they consider should be preserved in the national interest because of their historical and or architectural significance.

Historic Memorials Committee

The Historic Memorials Committee was established in 1911 for the purpose of securing portraits of distinguished Australians who had taken an active part in Federation. Later the Committee decided to obtain portraits of all Governors-General, Prime Ministers, Presidents of the Senate, Speakers of the House of Representatives, and other notable Australians. In addition the Committee has commissioned paintings recording special events connected with the Commonwealth Parliament.

The Committee comprises the Prime Minister (Chairman), the President of the Senate, the Speaker of the House of Representatives, the Vice-President of the Executive Council, the Leader of the Opposition, and the Leader of the Opposition in the Senate. An Art Advisory Board, comprising a group of artists, was established in 1912 to assist the Committee by advising on portraits to be commissioned by the Committee.

Commonwealth Art Advisory Board

Since its beginning in 1912 the Art Advisory Board has always consisted of artists. At present there are five members. As well as assisting the Historic Memorials Committee the Board advises the Government on the purchase of works of art for inclusion in the National Collection. In 1968–69 $100,000 was provided for this purpose. The National Collection now contains over 2,000 works of art.

The Board, on behalf of the Government, organises and finances exhibitions of Australian art in overseas countries. In addition, it financially assists the showing in State Art Galleries of major exhibitions from abroad or assembled by one or more State Art Galleries. In 1968–69 $14,000 was provided to meet the costs involved in these exhibitions.

SCIENTIFIC AND INDUSTRIAL RESEARCH IN AUSTRALIA

A special article on Science and Technology in Australia, prepared by the Commonwealth Scientific and Industrial Research Organization of Australia, was included in Year Book No. 49 (*see* page 781). A short account of the development of research in Australia and of the governmental and university organisations engaged in research was included in Year Book No. 53 (*see* pages 650–2).

The following is a brief description of the research activities of selected Commonwealth Government agencies and scientific societies.

Australian Industrial Research and Development Grants Board

Research in industry has expanded somewhat in recent years, though not at the same rate as in Government agencies or the universities. There is a trend for larger firms to establish their own laboratories, and appreciable sums are being spent on research in the chemical, metals, sugar, and paper industries. To encourage this trend the Government introduced the *Industrial Research and Development Grants Act* 1967. The legislation, administered by the Australian Industrial Research and Development Grants Board, provides for the payment of grants on a dollar for dollar basis to Australian manufacturing and mining companies for increased research and development expenditure.

Companies employing professional research staff are assisted in the performance of their own research and development, but the Act also makes provision for companies to contract research and development with approved research organisations.

The first grants to industry under this Act were made in 1968 and the Government has made available $6 million a year for this purpose. Special taxation concessions also apply to expenditure on research and development.

Commonwealth Scientific and Industrial Research Organization

The Commonwealth Scientific and Industrial Research Organization (C.S.I.R.O.) is Australia's largest civil scientific body. Established as the Council for Scientific and Industrial Research (C.S.I.R.) in 1926, it was re-organised in 1949 under the Science and Industry Research Act and now has a staff of over 6,000 including some 1,800 professional scientists. An account of the organisation and work of the former Council, and the earlier Commonwealth Institute of Science and Industry from which the Council was formed, was given in earlier issues of the Year Book. (*See* No. 14, page 1061 and No. 37, page 1183.)

The principal function of C.S.I.R.O. is to carry out scientific research for the primary and secondary industries of the Commonwealth and its Territories. C.S.I.R.O. does not conduct defence research, medical research or atomic energy research. The other powers and functions of C.S.I.R.O. as defined in the Science and Industry Research Act of 1949, include:

the training of scientific research workers and the awarding of scientific research studentships and fellowships;

the making of grants in aid of pure scientific research;

the recognition or establishment of associations of persons engaged in any industry, for the purposes of carrying out industrial scientific research and the co-operation with, and the making of grants to, such organisations;

the testing and standardisation of scientific apparatus and instruments and the carrying out of scientific investigation connected with standardisation;

the collection and dissemination of information relating to scientific and technical matters;

the publication of scientific and technical reports, periodicals and papers.

Organisation

C.S.I.R.O. is a statutory corporation operating under its own Act of Parliament and exercising its powers subject to the regulations and the approval of the Minister for Education and Science.

The governing body of the Organization is the Executive, which consists of nine members appointed by the Governor-General. There are five full-time members, one of whom is chairman, and four part-time members. At least five of the members must possess scientific qualifications. The Executive is responsible to the Minister for the policy and the work of the Organization.

For carrying out its research work, C.S.I.R.O. is divided into four major group laboratories and a number of Divisions and Sections. The four group laboratories are the Animal Research Laboratories comprising four Divisions, the Chemical Research Laboratories comprising five Divisions, the National Standards Laboratory comprising two Divisions, and the Wool Research Laboratories comprising three Divisions. There are also twenty-one independent Divisions in other research fields and an additional five independent Sections. The Head Office is in Melbourne and regional administrative offices are located at Brisbane, Canberra, Melbourne, and Sydney. The Organization also maintains the Australian Scientific Liaison Office in London and the Office of the Scientific Attaché in Washington.

Since the Organization's activities are Commonwealth-wide and often involve extensive field work, a number of branch laboratories and field stations have been established in various parts of Australia. The more important of these are included in the following lists.

Laboratories and Divisions

Animal Research Laboratories, consisting of the following four Divisions.

Animal Genetics, Sydney, with a branch laboratory and field station at Rockhampton, Queensland, and field stations at Armidale and Badgery's Creek, New South Wales.

Animal Health, Melbourne, with branch laboratories in Sydney and Brisbane, and field stations at Jimboomba, Queensland, and Tooradin North and Werribee, Victoria.

Animal Physiology, Sydney, with a laboratory and field station at Armidale, New South Wales, and a branch laboratory in Brisbane.

Nutritional Biochemistry, Adelaide, with a field station at O'Halloran Hill, South Australia.

Chemical Research Laboratories, Melbourne, consisting of the following five divisions.
- Applied Chemistry.
- Applied Mineralogy, with branch laboratories in Perth and Sydney.
- Chemical Engineering.
- Chemical Physics.
- Mineral Chemistry, with a branch laboratory in Sydney.

National Standards Laboratory, Sydney, consisting of the following two Divisions.
- Applied Physics.
- Physics, with an optical observatory at the Solar Observatory, Culgoora, New South Wales.

Wool Research Laboratories, consisting of the following three Divisions.
- Protein Chemistry, Melbourne.
- Textile Industry, Geelong, Victoria.
- Textile Physics, Sydney.

The other Divisions are as follows.
- Building Research, Melbourne, with an office in Port Moresby, New Guinea.
- Computing Research, Canberra, with subsidiary installations at Adelaide, Melbourne, Sydney, Brisbane, Perth and Griffith, New South Wales.
- Dairy Research, Melbourne.
- Entomology, Canberra, with branch laboratories in Sydney, Brisbane, Hobart, Perth and at Armidale, New South Wales, and Townsville, Queensland.
- Fisheries and Oceanography, Cronulla, New South Wales, with branch laboratories in Melbourne, Perth and Redcliffe, Queensland.
- Food Preservation, Sydney, with branch laboratories at Gosford, New South Wales, (operated jointly with the New South Wales Department of Agriculture), and in Brisbane.
- Forest Products, Melbourne.
- Horticultural Research, Adelaide, with a field station at Merbein, Victoria.
- Irrigation Research, Griffith, New South Wales.
- Land Research, headquarters in Canberra, and field stations and laboratories at Alice Springs, Katherine and Darwin, Northern Territory, and Kununurra, Western Australia.
- Mathematical Statistics, Adelaide, with officers stationed at a number of Divisions and Sections and at the University of Melbourne.
- Mechanical Engineering, Melbourne.
- Meteorological Physics, Melbourne.
- Plant Industry, Canberra, with branch laboratories in Perth, Hobart, and Brisbane, and at Deniliquin and Armidale, New South Wales, field stations and experimental farms at Canberra and Deniliquin, New South Wales and Baker's Hill, Western Australia, and a tobacco research institute at Mareeba, Queensland.
- Radiophysics, Sydney, with the Australian National Radio Astronomy Observatory at Parkes, New South Wales, and a radio observatory at the Solar Observatory, Culgoora, New South Wales.
- Soil Mechanics, Melbourne, with a branch laboratory in Adelaide.
- Soils, Adelaide, with branch laboratories in Brisbane, Canberra, Perth, Hobart, and Townsville, Queensland.
- Tribophysics, Melbourne.
- Tropical Pastures, Brisbane, with branch laboratories at Townsville and Lawes, Queensland, and field stations at Mundubbera, Samford and Woodstock, Queensland.
- Wildlife Research, Canberra, with branch laboratories in Perth, Western Australia and Alice Springs, Northern Territory

Sections
- Editorial and Publications, Melbourne.
- Ore Dressing Investigations, Melbourne.
- Physical Metallurgy, Melbourne.
- Upper Atmosphere, Camden, New South Wales.
- Wheat Research Unit, Sydney.

The Organization's total budget for 1968–69 was about $49,000,000. Nearly four-fifths of this was provided by the Commonwealth Government, while much of the remainder was provided by trust funds which have been set up by various primary producer groups. The largest of these is the Wool Research Trust Fund, but the wheat, dairy, meat, and tobacco industries also contribute substantial amounts. The funds are derived from a levy on produce matched by a Government contribution.

Mount Stromlo and Siding Spring Observatories

Mount Stromlo Observatory and Siding Spring Observatory are the two astronomical research stations of the Research School of Physical Sciences, Australian National University. The staff of the observatories are academic staff of the University's Institute of Advanced Studies. The permanent headquarters of the observatories is located at Mount Stromlo, together with the library, laboratories and offices of the scientific staff. The older telescopes are located on Mount Stromlo, the newer ones on Siding Spring Mountain. At Siding Spring there is a lodge to house the astronomers, permanently based at Mount Stromlo, who visit for short periods to make observations there.

The observatories constitute the principal centre of optical astronomical research in the southern hemisphere. Their research facilities are second only to the great observatories of the south-western United States, and because of their geographical latitude observations can be made on parts of the sky permanently inaccessible to northern astronomers. The functions of the observatories are to carry out original investigations (both observational and theoretical) in astronomy and astrophysics, and to provide post-graduate training for future Australian astronomers.

The direction of the researches conducted depends on the steadily widening interests of the staff and scholars as the subject of astronomy itself rapidly progresses. Areas of permanent interest to which the observatories have made important contributions include the evolution of stars and of stellar systems, the study of the Magellanic clouds and their globular star clusters, the chemical composition of the stars and the study of pulsating stars. The results of the work carried out at the observatories are published in the international scientific periodicals, principally in the *Monthly Notices of the Royal Astronomical Society* and the *Astrophysical Journal.*

Mount Stromlo Observatory is situated at 35° 19′ 16″ south latitude and 149° east longitude at an altitude of 2,560 feet. It is on the summit of a ridge of low hills in the Australian Capital Territory seven miles west of the city of Canberra. The first regular scientific work was started at this site in 1925, and the Observatory was incorporated in the Australian National University in 1957. The main instruments are 30-inch, 50-inch and 74-inch reflecting telescopes and associated spectrographs, photometers and spectral scanners.

Siding Spring Observatory was established in 1965. It is located at 31° 16′ south latitude and 148° 41′ east longtitude at an altitude of 3,820 feet and occupies the summit of Siding Spring Mountain in the Warrumbungle Ranges, near Coonabarabran, New South Wales. This site has one of the best climates for astronomical research to be found anywhere in Australia—considerably better than that at Mount Stromlo. The instruments at present operating at Siding Spring Observatory include a 40-inch and a 24-inch reflector.

Australian Atomic Energy Commission

Establishment and functions of the Commission

In November 1952 a Commission of three members was appointed to control the Commonwealth's activities in relation to uranium and atomic energy, and in April 1953, upon the enactment of the *Atomic Energy Act* 1953, the Commission was established as a statutory authority with powers and functions as defined in the Act. Under amending legislation the number of Commissioners was increased to five in April 1958. The Commission is a corporate and autonomous body controlling its own service. It functions under the direction of the Minister for National Development.

The functions of the Commission fall under two main headings. Firstly, it is responsible for undertaking and encouraging the search for and mining of uranium and is empowered to co-operate with the appropriate authorities of the States in connection with these and related matters. Secondly, it is authorised to develop the practical uses of atomic energy by constructing and operating plant for this purpose, carrying out research, and generally fostering the advancement of atomic energy technology.

Uranium prospecting and mining

Production of uranium concentrate in Australia is now confined to the Rum Jungle Plant, Northern Territory. Since 1953, mining and treatment operations here have been conducted for the Commonwealth by a mining company. Mining of presently known reserves of uranium in this area was finished in 1963, but treatment of stock-piled ore has continued. Australia's own domestic requirements of uranium oxide to the end of the present century are expected to be greater than currently known reserves. Because of this the Commonwealth has continued exploration for uranium in the Rum Jungle area and has encouraged private producers to resume exploration.

Research

The Commission's Lucas Heights Research Establishment is Australia's atomic energy research centre. Its research programme is concerned with the development of nuclear power, the production and utilisation of radioisotopes, and other related fields. It is directed towards the long-term development of national resources.

The research programme centres on a technical and economic assessment of a natural uranium fuelled, heavy water moderated reactor. This type of reactor system is now considered to be most suitable for future installation in Australia for the economic production of nuclear power. Particular attention is being devoted to the possibility of making reactor fuel by refining and fabricating uranium from Australian mines. During 1967 some twenty-six members of the Commission's technical staff were sent to Britain and Canada on long-term postings, in order to participate directly in development and construction of power reactors of this type.

The use of radioisotopes is increasing rapidly in Australia in scientific research and development, in treatment of diseases, and in agriculture and industry generally. Most of these, especially short-lived radioisotopes which cannot be imported, are being produced in the Commission's high flux research reactor HIFAR at Lucas Heights. Since 1967, a widening range of radio-pharmaceutical products has been produced to stringent standards for medical use and these are in considerable demand. The A.A.E.C. is also producing the majority of cobalt 60 teletherapy sources for cancer treatment in Australia, and is exporting high activity sources to New Zealand and to Asia. The Commission is promoting research into radioisotope applications and is co-operating with universities, industry and governmental bodies in making available the most up-to-date techniques involving the use of radioisotopes in every field.

Large-scale hydrological investigations using radioactive tracers have been conducted by the Commission. These have included sand tracing in Botany Bay and silt tracing in Newcastle Harbour and the Hunter River in association with maritime and development authorities.

Extensive research and development work on the technical and scientific applications of gamma radiation is also being carried out. The possibilities of radiation for such purposes as industrial sterilisation, production of new and improved materials, and the control of fruit fly and other insect pests are being investigated. Scientists at Lucas Heights are also studying the biological effects of radiation and questions of health and safety.

The Research Establishment has developed facilities for the absolute standardisation of radioisotopes and has participated in international intercomparisons in the health and safety field. Work is directed to various aspects of radiation dosimetry, to radiation biology, and to aspects of the toxicology of beryllium compounds.

Lucas Heights is a centre of specialised equipment and information. In addition to the research reactor HIFAR, used for testing materials and producing radioisotopes, there is much other equipment unique in Australia. All these facilities are available to universities and other institutions under suitable conditions. In these endeavours the Atomic Energy Commission is working in close co-operation with the United Kingdom Atomic Energy Authority, under arrangements which give Australia access to results of British research on peaceful atomic energy uses. Results of research in Australia are in like manner available to Britain. Work in Australia, though constituting a self-contained programme, is co-ordinated with the British programme to avoid overlapping of research objectives and duplication of investigations. Australia also has bilateral arrangements with the United States, Canada and Japan, and has accredited a diplomatic mission to the European Atomic Energy Community (Euratom). Australia is also taking part in the promotion of the peaceful uses of atomic energy through the International Atomic Energy Agency. For the year 1967–68 the Commission placed $112,129 worth of research contracts mainly within Australian universities on matters related to the research programme at Lucas Heights.

Civil Nuclear Explosives

Considerable potential exists in Australia for application of nuclear explosives for large civil engineering and mining projects. The Commission has kept in close touch with the development of the United States Plowshare programme. A United States expert visited Australia in 1962, and two others made a preliminary survey in 1968. In 1963 an Australian technical mission visited the United States of America to make a detailed examination of the use of nuclear explosives for peaceful purposes and the Commission has been represented at a number of field tests in the United States.

The Australian Institute of Nuclear Science and Engineering comprises the Australian Atomic Energy Commission and Australian universities. The Institute's operations are financed by membership subscriptions and a Commonwealth Government grant which amounted to $150,000 in 1967–68. The purpose of the Institute is to stimulate research and training in nuclear science and engineering within the universities and to arrange access for university research workers to the highly specialised equipment at the A.A.E.C. Research Establishment.

The Australian School of Nuclear Technology is jointly sponsored by the Commission and the University of New South Wales. Courses are being offered in nuclear technology, production and use of radioisotopes, radiological safety, health physics, and other related topics.

Scientific societies

Royal Societies

The following table contains the latest available statistical information regarding the Royal Societies in each State and in the Australian Capital Territory.

ROYAL SOCIETIES, DECEMBER 1968

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Canberra*
Year of charter . .	1866	1859	1884	1880	1913	1844	1930
Number of members .	395	578	326	266	240	595	159
Volumes of transactions issued(*a*) . . .	101	81	79	92	57	102	..
Number of books in library	33,180	32,500	70,596	24,000	7,190	36,600	..
Societies on exchange list.	400	336	301	345	244	315	..

(*a*) Cumulative total.

Australian Academy of Science

The Australian Academy of Science is the national institution representing science in Australia. Constituted by Royal Charter in 1954, the Academy promotes scientific knowledge and research, maintains standards of scientific endeavour and achievement in the natural sciences in Australia, and recognises outstanding contributions to the advancement of science. The Academy represents Australian science and scientists at the national and international level, organises meetings of scientists, holds symposia, and arranges for visits of scientists from other countries to Australia.

In its functions it is comparable with the Royal Society of London and national academies of science of many other countries. Its Fellows (designated F.A.A.) are eminent in some branch of the physical or biological sciences in Australia, occupying professional positions in universities, the Commonwealth Scientific and Industrial Research Organization, other research organisations, and industry. A very few places are reserved for Fellows who have rendered conspicuous service in the cause of science. No more than six new Fellows are elected in any one year. Its present membership is about 120 Fellows.

The Academy co-ordinates Australian contributions to such co-operative ventures as the International Geophysical Year, the International Year of the Quiet Sun, and the International Biological Programme. Representation is provided at the general assemblies of the International Scientific Unions and similar bodies relating to astronomy, geophysics, geology, physics, crystallography, mathematics, biochemistry, physiology, geography, biological sciences, chemistry, Antarctic research, space research, and oceanic research.

As the Australian Academy of Science is too young a body to be financially self-sufficient, the Commonwealth Government makes annual grants of general purpose funds without affecting the autonomy of the Academy. These grants, together with substantial private benefactions, enable the Academy to continue its work. Research fellowships provided by industry are administered. The Academy is managed by an elected council comprising a president, treasurer, two secretaries and eight ordinary members who are drawn equally from the physical sciences and biological sciences. Chief administrative officer is the Executive Secretary, who is not a Fellow. Its conference centre in Canberra was opened in 1959.

Australian and New Zealand Association for the Advancement of Science (ANZAAS)

This Association was founded in 1887. Its objects are 'to advance the knowledge and to promote a spirit of co-operation between scientific workers and scholars and those in sympathy with science and scholarship generally, especially in Australia and New Zealand'. The 41st ANZAAS Congress was held in Adelaide on 18 to 22 August 1969, and the 42nd Congress will be held in Port Moresby, 17 to 21 August 1970.

The ANZAAS Central Office is in Sydney and Divisions are operating in both New South Wales and Western Australia.

Other scientific societies

The Linnean Society of New South Wales, with headquarters in Sydney, was founded in 1874 for 'the cultivation and study of the science of natural history in all its branches'. Sir William Macleay, who died in 1891, during his lifetime and by his will endowed the Society to the amount of $134,000, which has been increased by investment to approximately $260,000. The objects of the Society are achieved by holding meetings, by publishing proceedings, by maintaining a library, and by offering research fellowships. The Society publishes annual volumes of the proceedings, issued in three parts, in which are printed papers read at the general meetings. Ninety-two volumes of such proceedings have been issued and the Society exchanges with about 300 kindred institutions and universities throughout the world. The library has some 19,000 volumes. The Society offers annually to graduates of the University of Sydney, who are members of the Society and resident in New South Wales, a research fellowship (Linnean Macleay Fellowship) in various branches of natural history. The membership at the end of 1968 was 307.

The British Astronomical Society has a branch in Sydney, and in each of the States there is a branch of the Australian Medical Association.

There are more than 200 other learned societies devoted to the study of particular sciences. Some of these, including the Royal Australian Chemical Institute and the Institution of Engineers, Australia, are qualifying bodies, admission to which is by qualification only. Others, such as the Institute of Food Technologists, are open to any interested person. Some societies, such as the Australian Biochemical Society, have annual symposia of a very high standard. A great many of these bodies publish appropriate journals.

CHAPTER 16

PUBLIC JUSTICE

Statistics of public justice are influenced by a number of factors which affect comparability from State to State and from year to year, e.g.:

(*a*) differences in the jurisdiction of courts;
(*b*) changes in the law in particular States and differences in the laws between States;
(*c*) differences in the methods of compiling the figures (e.g. in respect of persons convicted for more than one offence);
(*d*) the attitude to laws such as those connected with liquor, vagrancy, gaming, and traffic offences;
(*e*) the strength and distribution of the police force;
(*f*) the proportion of various types of crimes reported and solved.

The Australian legal system

Development of the system

The two major factors in the development of the Australian legal system have been its British origin and the Commonwealth Constitution of 1900. When the various parts of Australia were first settled by British colonists, the common law and statutes of England were brought with them by the settlers. When local law-making bodies were established, the law so brought in was gradually modified and augmented by local legislation, but the Imperial Parliament in London also continued to legislate (to a lesser and lesser extent) in respect of Australia. The Commonwealth Constitution of 1900, which is itself an Imperial Act, limited the legislative power of State Parliaments in some respects and created a federal legislature. Since the *Statute of Westminister Adoption Act* 1942, the Imperial Parliament can legislate for Australia only at Australia's request. The sources of Australian law of today are, therefore, found in Commonwealth and State legislation, in some Imperial legislation and in the common law. Three of the States (Queensland, Western Australia and Tasmania) have Criminal Codes, and separate consolidations of the Statutes of the Commonwealth and of all States except Western Australia (which has adopted a system of reprinting of individual statutes at intervals) have been brought out from time to time.

There are few constitutional or other legislative guarantees of individual rights and liberties in Australia. These rights are nevertheless protected, because a basic feature of the Australian system is the 'rule of law': no act, official or unofficial, however bona fide and apparently reasonable, which infringes the liberty or rights of an individual is justifiable unless it is authorised by law, and for any such unlawful act, by whatever authority commanded, the official or other person is personally liable in an action in the ordinary courts. In the case of subordinate legislation, and even in the case of Commonwealth or State Acts, the validity of the law itself may be challenged in the courts. The remedy for the protection of the personal liberty of the individual is the writ of habeas corpus, which requires the person named therein to be produced in the court.

Australian law adheres to the principle that judicial control must in general be exercised by ordinary courts. There is no integrated system of administrative tribunals, but there is a great variety of such tribunals of various descriptions. The ordinary courts exercise supervision over administrative tribunals either by way of statutory appeal or by the use of prerogative writs of mandamus, prohibition, or certiorari, by which the administrative tribunals can be enjoined to perform a duty or to abstain from excess of jurisdiction, or can have their decisions set aside.

Independence of the judiciary is an essential part of the Australian legal system. Security of tenure of superior court judges is guaranteed, mostly by the Constitutions of the Commonwealth and the States, and they can be removed from office only by resolution of both Houses of Parliament of the Commonwealth or the States, as the case may be, for proven misbehaviour or incapacity. Their independence is further secured by relatively high salaries which, in the case of High Court judges, cannot be reduced during their tenure of office, and liberal (mostly non-contributory) pensions for the judges or their widows. Salaries of High Court judges were increased in June 1969 to $30,000 for the Chief Justice and $27,000 for each other Justice. Allowances of $2,000 and $1,500 respectively are also provided.

Civil judgments given in the courts of any part of Australia can be enforced in any other part of Australia under the *Service and Execution of Process Act* 1901–1963. Since 1 January 1964 this applies also to fines imposed by courts of summary jurisdiction.

State and Territory courts

Civil jurisdiction. Lower civil courts (i.e. Magistrates' Courts, Courts of Petty Sessions, Local Courts, Small Debts Courts, Courts of Request, and Courts of General Sessions) are usually constituted or presided over by a stipendiary or special magistrate or a commissioner. In some limited instances justices of the peace may exercise the jurisdiction of the court. Local Courts are sometimes constituted by a judge. The powers of the magistrates in the various States and Territories are set out on pages 567–9. In most cases, unless the amount involved is very small, appeal may be made to a higher court against a magistrate's decision. In any case the Supreme Court has a supervisory power, by means of prerogative writs, to examine whether a lower court has properly exercised its jurisdiction. In the higher courts (i.e. District Courts, County Courts and the Supreme Courts) actions are usually tried by a single judge, sitting with or without a jury, from whose judgment appeal lies to the bench of the Supreme Court. In certain cases the appeal can be carried to the High Court of Australia. Appeals to the Privy Council are referred to on page 567.

Criminal jurisdiction. Criminal courts are of two kinds, namely, courts of summary jurisdiction and higher courts. Courts of summary jurisdiction, usually called Courts of Petty Sessions, may deal summarily with minor offences; higher courts, known as Courts of Sessions, Quarter Sessions or General Sessions (not to be confused with the lower court of civil jurisdiction of that name) and the Supreme Court, hear indictable offences. A court of summary jurisdiction consists of a stipendiary or police magistrate, or two or more justices of the peace; a higher court consists of a judge or chairman, sitting with a jury. The jury finds as to the facts of the case, and the judge determines the applicable law and, within the limits of the law, the punishment of the convicted person.

In the case of other than minor offences a preliminary hearing is held before a stipendiary magistrate or justice of the peace for the purpose of determining whether a prima facie case has been made out. If the magistrate or justice of the peace finds that there is a case to answer, the person charged is committed for trial at a higher court. A magistrate or justice of the peace has power to release on bail. There is an appeal to a higher court from the decision of a court of summary jurisdiction hearing a minor offence, and an appeal from a higher court to the full bench of the Supreme Court, or Court of Criminal Appeal. A further appeal may, with leave, be brought to the High Court of Australia.

Federal courts

The judicial power of the Commonwealth is vested in the High Court of Australia (the Federal Supreme Court), in the Federal courts created by Parliament (the Federal Court of Bankruptcy and the Commonwealth Industrial Court), and in the State courts invested by Parliament with Federal jurisdiction, both civil and criminal. The nature and extent of the judicial power of the Commonwealth are set out in Chapter III. (§§ 71–80) of the Commonwealth Constitution (*see* pages 15–16 of this Year Book). Particulars concerning the Federal Court of Bankruptcy are given on pages 586–8 of this chapter, and information regarding the Commonwealth Industrial Court, which was established under the *Conciliation and Arbitration Act* 1904–1967, is included in the chapter Labour, Wages and Prices (pages 261–2). In November 1968 a bill was introduced in Federal Parliament to establish a new Federal Court to be known as the Commonwealth Superior Court. The new court would replace the present Federal Court of Bankruptcy and the Commonwealth Industrial Court, be a superior court of general Federal jurisdiction in matters other than matrimonial causes and criminal prosecutions and perform multifarious special functions under Commonwealth statutes.

High Court of Australia

The High Court of Australia consists of a Chief Justice and six other Justices. Its principal seat is in Melbourne, but sittings are held in every State capital as occasion requires. The High Court has both original and appellate jurisdiction. Its original jurisdiction is usually exercised by a single Justice, appellate jurisdiction by at least three Justices.

The Constitution itself confers original jurisdiction on the High Court in all matters (i) arising under any treaty, (ii) affecting consuls or other representatives of other countries, (iii) in which the Commonwealth, or a person suing or being sued on behalf of the Commonwealth, is a party, (iv) between States, or between residents of different States, or between a State and a resident of another State, (v) in which a writ of mandamus or prohibition or an injunction is sought against an officer of the Commonwealth. In addition, Parliament may, under the Constitution, confer additional original jurisdiction on the High Court in certain classes of matters, and has in fact conferred original jurisdiction on the High Court in all matters arising under the Constitution or involving its interpretation and in trials of indictable offences against the laws of the Commonwealth. In matters (i) and (v) and in suits between the Commonwealth and a State or between States the jurisdiction of the High Court is exclusive of that of the State Courts, and in matters (other than trials of indictable offences) involving any question as to the limits *inter se* of the constitutional powers of the Commonwealth and those of the States the jurisdiction of the High Court is exclusive of that of the Supreme Courts of the States. The High Court's jurisdiction in trials of indictable offences has not been used for many years.

Under the Constitution the High Court has jurisdiction, with such exceptions and subject to such regulations as the Parliament permits, to hear and determine appeals from all judgments, decrees, orders, and sentences of (i) any Justice or Justices exercising the original jurisdiction of the High Court, (ii) any other Federal Court or court exercising Federal jurisdiction and (iii) from the Supreme Court or other court of any State from which appeal lay to the Privy Council at the establishment of the Commonwealth. In respect of (iii) the Parliament has prescribed that, generally, appeal can be brought only by special leave of the High Court. However, in the case of judgments affecting the status of any person under the laws relating to aliens, marriage, bankruptcy or insolvency, or in respect of any sum or matter at issue, or involving any claim, demand or question regarding any property or civil right, of the value of $3,000, appeal may be brought as of right from final judgments, and by leave of the High Court or the Supreme Court from interlocutory judgments.

By Acts of Parliament and by subordinate legislation the High Court has also been given appellate jurisdiction in respect of the courts of the Territories under the control of the Commonwealth. Provision is also made in various enactments for appeal to the High Court on points of law from administrative determinations, such as decisions of the Commissioner of Taxation, Taxation Boards of Review, the Commissioner of Patents, or the Registrar of Trade Marks. Such proceedings, although called appeals, are in reality proceedings in the original jurisdiction of the High Court. Under the proposals announced in Parliament in 1967 and 1968, these functions would be transferred to the new Commonwealth Superior Court.

Transactions of the High Court are shown on page 579.

Appeal to the Privy Council

There had been since Federation an appeal, by special leave of the Privy Council, from the High Court to the Privy Council, except in certain important types of constitutional disputes, involving questions of the powers of the Commonwealth vis-à-vis the States. In the latter type of case a certificate of the High Court, in effect granting leave to appeal, is necessary.

In 1968 the Commonwealth Parliament passed an Act, which came into operation on 1 September 1968, restricting appeals to the Privy Council. Under the Act, no appeal can be taken to the Privy Council from the Supreme Court of any Territory or from any Federal court other than the High Court, and special leave of the Privy Council to appeal from the High Court may be asked only in matters that come to the High Court on appeal from the Supreme Court of a State exercising jurisdiction not derived from Commonwealth legislation and which do not raise in the High Court any questions of the application or interpretation of the Commonwealth Constitution, or Commonwealth or Territory legislation.

There is provision for appeals from the State Supreme Courts direct to the Privy Council, but another Federal Act passed in 1968 makes it clear that a decision of a court of a State, including a decision of a Supreme Court, is not subject to appeal to the Privy Council, whether by special leave or otherwise, if it was given in federal jurisdiction.

Lower (magistrates') courts

Powers of magistrates

New South Wales. The powers of the magistrates with regard to offences punishable summarily depend in each case on the statute which creates the offence and gives them jurisdiction. A magistrate may, with the consent of the accused, deal summarily with certain indictable offences under the Commonwealth Crimes Act and offences involving $500 or less under the State Crimes Act; offences under the Commonwealth Act and certain offences under the State Act may be disposed of summarily without such consent if the amount involved does not exceed $100. Except in the case of a very few statutes, and excluding cumulative sentences, the power of sentence is limited to twelve months. Imprisonment in default of fine is regulated by a scale limiting the maximum period according to the sum ordered to be paid, but in no case exceeding twelve months. Actions for debt and damage within certain limits also come within magisterial jurisdiction. In cases of liquidated debts, and damages whether liquidated or unliquidated, the amount is limited to $300 before a court constituted by a stipendiary magistrate. Where the amount claimed exceeds $100 the Court must transfer the action to the District Court when the defendant gives notice that he objects to the action being heard and determined by a Court of Petty Sessions. Magistrates have power to entertain claims of up to $1,000 under the Money Lenders and Infants Loans Act, 1941–1961. The amount in actions of debt or damages before one or more justices of the peace ranges up to $60 in certain cases.

Victoria. The civil jurisdiction of magistrates is restricted as follows: (*a*) ordinary debts, to $200; (*b*) any action in tort or contract, with the exception of a few torts such as breach of promise or illegal arrest (on which magistrates have no power to adjudicate), to $600; and (*c*) any action in tort arising out of any accident in which a vehicle is involved, to $1,000. No definite limit is fixed to the powers of the magistrates on the criminal side, and for some offences sentences of up to two years' imprisonment may be imposed. The proportion of long sentences is, however, comparatively small.

Queensland. Generally speaking, the maximum term of imprisonment which a magistrate or justice of the peace can impose is six months, but in certain cases sentences of twelve months may be imposed. Some examples are Sections 233, 344 and 445 of the Criminal Code (betting houses, aggravated assaults, and unlawfully using animals). There is also provision for applying cumulative sentences. In civil matters, a magistrate has jurisdiction in actions involving an amount of not more than $1,200, unless all parties to the action agree that no such limitation shall apply.

South Australia. The power of special magistrates to impose fines and imprisonment is defined by the special Act creating the offence and conferring jurisdiction. In the case of minor indictable offences which are tried summarily, a maximum penalty of $200 fine or two years' imprisonment is fixed by the Justices Act, 1921–1965. Magistrates also have power to hear certain civil actions in which the amount claimed is less than $2,500.

Western Australia. The powers of magistrates and justices of the peace with regard to offences which are tried summarily are governed by the Act creating the offence and giving them jurisdiction. Imprisonment in default of payment of a fine is regulated by a scale limiting the period according to the amount of the fine but cannot exceed six months. The civil jurisdiction of Local Courts is restricted in general to $1,000. By consent of the parties, any action that might be brought in the Supreme Court may be dealt with in a Local Court. Justices may act in the case of illness or absence of the magistrate. Magistrates are coroners, and justices may be appointed as acting coroners. Magistrates have appellate jurisdiction under some statutes and in country districts act as Chairmen of the Session Courts. They may be appointed as Commissioners of the Supreme Court. On the goldfields the magistrate is also the warden.

Tasmania. Magistrates are empowered to hear and determine in Courts of Petty Sessions all offences when an enactment expressly or by implication provides that the matter is to be determined summarily, or by or before justices of the peace, or that any offence is to be punishable upon summary conviction. Stealing and certain allied crimes are deemed to be summary offences where the value of the property concerned does not exceed $20. Where the value of the property exceeds $20 but is not more than $400 the defendant may elect summary trial or trial by jury. This right of election applies to certain other charges such as escape or rescue; facilitating the escape of a prisoner; rescuing goods legally seized; making a false declaration or statement, etc. In the case of a charge of forgery or uttering, a right of election exists provided the complaint is in respect of a cheque for not more than $400. In the case of a charge of breaking into a building, other than a dwelling house, a defendant may elect to be tried summarily under certain conditions. No general limit is fixed in respect of sentences, the statute creating the offence almost invariably laying down the penalty. Where this is not the case, the *Contravention of Statutes Act* 1889 provides that a fine of $100 may be imposed. Sentences of imprisonment which justices may impose vary with the nature of the offence, with a maximum of two years. The aggregate of terms of cumulative sentences may not exceed two years. The civil jurisdiction of magistrates is divided into two categories. A Commissioner of the Court of Requests, provided he is a legal practitioner, may hear actions for the recovery of debts up to $1,500 or damages up to $1,000. As Commissioners are invariably police magistrates, this jurisdiction is State-wide. Courts of General Sessions, constituted by at least two justices of the peace, exercise similar powers, but the jurisdiction cannot exceed $100.

Northern Territory. Stipendiary and special magistrates constituting courts of summary jurisdiction try offences punishable summarily. The punishment that may be imposed depends on the law creating the offence. Where there is no magistrate available, the offence may be tried by two or more justices of the peace or, if all parties consent, by one justice. Proceedings for committal on indictable offences may be heard by either a magistrate or a justice. Certain indictable offences under the Territory law may be tried summarily by a magistrate or two justices, who may impose a fine of up to $200 or imprisonment for up to two years. A stipendiary magistrate constituting a local court has a civil jurisdiction to hear and determine claims for not more than $2,000. A local court constituted by two justices (every special magistrate is also a justice of the peace) has a civil jurisdiction to hear claims up to $100.

Australian Capital Territory. Stipendiary and special magistrates have general jurisdiction to try offences punishable summarily and also where a person is made liable to a penalty or punishment and no other provision is made for trial. The punishment depends on the law which creates the offence. In addition to jurisdiction (possessed by stipendiary and special magistrates throughout

Australia) to try summarily with the consent of the defendant offences indictable under the *Crimes Act* 1914–1966 (in which case the magistrate cannot impose a fine exceeding $200 or imprisonment exceeding one year), under Territory law certain indictable offences may also be tried summarily by a magistrate, who may impose a fine not exceeding $100 or imprisonment for up to one year. Magistrates also hear proceedings for committal on indictable offences. In civil proceedings, magistrates try actions for amounts up to $400. Justices of the peace have no judicial functions.

First offenders

In all States and Territories statutes are in force for dealing with first offenders. Provisions are incorporated in the various Acts whereby courts may extend leniency to the offender by means such as: (i) dismissal of the charge without proceeding to a conviction; (ii) freeing the offender or suspending sentence with the requirement of a recognisance for good behaviour for a specified period; and (iii) by placing the offender under the supervision of a probation officer for a specified period.

Children's courts

Special provisions exist in all States and Territories for dealing with juvenile offenders in special courts. Particulars of the relevant legislation and the constitution and powers of these courts are given below.

New South Wales. Children's Courts, first established in 1905, now exercise jurisdiction under the Child Welfare Act, 1939–1967. Each court consists of a special magistrate with jurisdiction within a proclaimed area. Elsewhere the jurisdiction of a Court may be exercised by a special magistrate or two justices of the peace. Where practicable, Children's Courts are not held in ordinary court rooms, and persons not directly interested are excluded from any hearing.

The magistrates exercise all the powers of a Court of Petty Sessions in respect of offences committed by or against children under eighteen years of age. They also exercise jurisdiction in respect of neglected and uncontrollable children. Their functions are reformative, not punitive; they may commit children to institutions, to the care of persons other than the parents, or to the care of the Minister.

Victoria. Under the *Children's Court Act* 1958, the jurisdiction of Children's Courts is restricted, with certain exceptions, to children under 17 years of age. Two stipendiary special magistrates with jurisdiction throughout the State and, in addition, honorary special magistrates, operate in some metropolitan courts and provincial cities. At Country Courts to which no special magistrates are appointed, the local stipendiary magistrate usually constitutes the bench. The Children's Court may deal with all offences except homicide. However, consent to the jurisdiction of the Children's Court must be indicated by the child (or a parent if the child is under 15 years of age) before an indictable case may proceed.

The primary aim of the Children's Court is reformation and rehabilitation of the offender, and the Court, under Section 27 (3) of the *Children's Court Act* 1958, must 'firstly have regard to the welfare of the child'.

The probation system has been in use by the Children's Court since 1907, and there are now in Victoria a large number of honorary probation officers as well as six stipendiary probation officers. Problem cases are referred by the Court for investigation to a Children's Court Clinic, which is staffed by psychiatrists, psychologists and social workers.

Queensland. Children under the age of seventeen years who come before the Court are dealt with under *The Children's Services Act of* 1965. A Children's Court has jurisdiction to try or sentence a child charged with an indictable offence other than such an offence for which he would be liable, were he not a child, to imprisonment with hard labour for life. Children charged with simple offences or breaches of duty also appear before a Children's Court, as do children in respect of whom an application may be made to the Court for their committal to care and control (unruly children, etc.) or admission to care and protection (neglected children, etc.). The custody and or maintenance of a person under the age of twenty-one years may be sought by the mother or father of that person by application to a Children's Court.

The Children's Court in the metropolitan and near country areas is presided over by a specially appointed Children's Court magistrate. Proceedings are held *in camera.* A non-commissioned police officer is present to offer any observations he considers necessary and to assist the magistrate. An officer of the Department of Children's Services is also present. In country areas the Court is presided over by the local stipendiary magistrate, or in his absence, by two justices of the peace.

A child guilty of an offence shall not be imprisoned unless the Court is satisfied that he is so unruly that he should be detained in custody other than under the control of the Director of the Department of Children's Services, in which case it may order that he be imprisoned for a period not exceeding two years; if a child is convicted of an offence of a sexual nature committed on a child, the Court may make orders and deal with the child as if he were not a child and as if such

Court were a Magistrate's Court; a child guilty of an offence may be committed to the care and control of the Director for a period not exceeding two years with or without conviction; upon conviction the Court may order that the Director exercise supervision over a child until eighteen years or for a period not exceeding two years (even though he may turn eighteen years in that period) or without conviction for a period not exceeding twelve months; the Court may fine the child in accordance with the Act under which he was charged; it may order the parent or guardian to enter into a recognisance with or without surety to exercise proper care, protection, and guardianship over the child; it may order the child, parent, or guardian to pay compensation, costs, or make restitution; the Court may admonish and discharge the child without convicting him.

South Australia. Persons under the age of eighteen years charged with offences are dealt with in Juvenile Courts, from which the public are excluded. The procedure and powers of the Court are laid down in the Juvenile Courts Act, 1965–66, the Justices Act, 1921–1960, the Social Welfare Act, 1926–1965, and the Offenders Probation Act, 1913–1963. Any Court of Summary Jurisdiction may be a Juvenile Court provided that it is constituted by a special magistrate if one is available; and if it is constituted by two justices of the peace, they must be from a special panel of justices selected for the purpose. Any case may be referred by any other Juvenile Court to the Adelaide Juvenile Court. A Juvenile Court has power to deal finally with all offences except homicide, but in the case of indictable offences it may commit for trial in the Supreme Court. For offences punishable by fine, it may impose the fine provided, subject to a maximum of $100. A juvenile may not be imprisoned; but if the Court is constituted by a special magistrate, he may be committed to a reformative institution. The Court, however constituted, may place the defendant under the control of the Minister of Social Welfare and disqualify him from driving a motor vehicle.

Western Australia. Children's Courts deal with offenders under the age of eighteen years and hear cases of all offences against children. Special magistrates are appointed for Children's Courts and the Governor may appoint other persons to be members of a particular Children's Court. One member may sit and adjudicate with the special magistrate, but in the magistrate's absence at least two members must be present.

A Children's Court is deemed to be a court of summary jurisdiction and may exercise exclusive jurisdiction in respect of all offences except wilful murder, murder, manslaughter, or treason alleged to have been committed by children.

Adults charged with certain indictable offences against children may forgo the right to trial by jury and agree to be dealt with summarily by Children's Courts. This power to exercise summary jurisdiction is designed to eliminate as far as possible the necessity for children to appear in open courts as witnesses in cases dealing with sex offences. A Children's Court may commit such offenders for sentence by the Supreme Court.

Tasmania. Under the provisions of the *Child Welfare Act* 1960 (as amended in 1963), Children's Courts are established to deal with offenders under the age of seventeen years. Special magistrates may be appointed by the Governor to adjudicate in these Courts and one such magistrate is sufficient to constitute a Court. In the absence of a special magistrate, the Court may be constituted by a police magistrate or two justices of the peace.

The Court is empowered to deal with children under seventeen years of age and no proceedings can be instituted without the consent of the Director of Social Welfare. Before disposing of the case the Court must receive a report from a child welfare officer, unless the offence is considered trivial or the Director decides not to provide one.

In summary proceedings a conviction is normally recorded only when the child receives a prison sentence. Children under sixteen years cannot be sentenced to imprisonment and children sixteen years of age cannot be sentenced for more than two years. Maximum fines are $20 for offenders under fourteen years and $50 for those over fourteen years. The Court may impose supervision orders or make the child a ward of the State, i.e. the child is placed under the supervision of the Director of Social Welfare until his eighteenth birthday.

Northern Territory. The *Child Welfare Ordinance* 1958–1967 provides for the establishment of Children's Courts. These courts are constituted by a special magistrate. Where no Children's Court has been established for a particular area or where special circumstances require it, the jurisdiction of a Children's Court may be exercised by a court of summary jurisdiction constituted by a special magistrate.

A Children's Court has jurisdiction in respect of all offences committed by persons under seventeen years of age in respect of which proceedings may be taken in a court of summary jurisdiction. In dealing with such offences, the Court may, in cases other than homicide, impose a fine not exceeding one hundred dollars or, if the child is not under fourteen years of age, a sentence of imprisonment of not more than six months. In addition, the Court's powers include releasing an offender on probation, committing him to the care of a specified person (in which case the offender may be declared a State child), or committing him to an institution for a specified period.

Children's Courts also exercise jurisdiction in respect of destitute, neglected, incorrigible, or uncontrollable children.

Australian Capital Territory. The *Child Welfare Ordinance* 1957–1966 provides that the Court of Petty Sessions constitutes the Children's Court when it is hearing proceedings involving persons under the age of eighteen years. Its proceedings are similar to those of an ordinary Court of Petty Sessions, except that persons not directly interested are excluded from the Court.

In addition to the power to deal with summary offences, the Children's Court has power to hear and determine summarily a charge for an indictable offence other than an offence punishable by death. In either case, the Court's powers include releasing an offender on probation, committing him to the care of a specified person, making him a government ward, or committing him to an institution for up to three years. The Children's Court also exercises jurisdiction in respect of neglected or uncontrollable children.

Proceedings at lower (magistrates') courts

Particulars of the differences in the jurisdiction of lower courts in the various States are given under Powers of Magistrates (pages 567–9). The proceedings of these courts are summarised in this paragraph. The statistics in the following tables are influenced by the factors affecting comparability listed at the beginning of this chapter (page 565).

Criminal proceedings—total cases. The total numbers of cases dealt with at magistrates' courts in each State and Territory for the years 1963 to 1967 are shown in the following table.

CASES AT MAGISTRATES' COURTS(*a*): OFFENCES CHARGED, STATES AND TERRITORIES, 1963 TO 1967(*b*)

State or Territory	*1963*	*1964*	*1965*	*1966*	*1967*
New South Wales	323,501	341,351	341,171	338,808	336,746
Victoria	290,332	303,096	323,644	307,465	318,172
Queensland(*c*)	87,737	97,878	113,568	111,743	95,155
South Australia(*c*)	67,372	64,401	71,468	83,080	98,588
Western Australia	60,086	60,510	67,244	66,863	76,458
Tasmania	34,728	31,702	36,535	37,624	36,550
Northern Territory	(*d*)5,886	(*d*)6,581	(*d*)7,519	(*d*)7,961	10,336
Australian Capital Territory	6,435	7,797	7,845	9,025	7,318
Australia	**876,077**	**913,316**	**968,994**	**962,569**	**979,323**

(*a*) Includes Children's Courts, except for Northern Territory. (*b*) Excludes minor traffic offences settled without court appearance. (*c*) Year ended 30 June. (*d*) Excludes courts at Tennant Creek and Katherine.

Differences in the figures in the preceding table between States, and within a State over a period of time, are influenced by the large number of traffic offences and the arrangements which have been introduced at various times for dealing with them. Provision exists in the States and the Australian Capital Territory for settlement of parking and minor traffic offences by payment of fines without court appearance.

MINOR TRAFFIC OFFENCES SETTLED WITHOUT COURT APPEARANCES STATES AND A.C.T., 1963 TO 1967

State or Territory	*1963*	*1964*	*1965*	*1966*	*1967*
New South Wales	389,395	381,058	400,459	464,122	411,447
Victoria	170,590	181,479	229,478	313,529	343,432
Queensland(*a*)	79,237	101,276	115,446	209,417	264,617
South Australia(*a*)	183,684	198,943	121,535	240,359	240,014
Western Australia	43,970	49,488	51,167	64,842	62,827
Tasmania	34,394	38,555	40,917	50,914	45,081
Australian Capital Territory	..	(*b*)1,419	5,145	3,949	10,132
Total	**901,270**	**952,218**	**964,147**	**1,347,132**	**1,377,550**

(*a*) Year ended 30 June. (*b*) From 14 September 1964.

Criminal proceedings—cases in which convictions were made. Of the cases dealt with in magistrates' courts, the following tables show the number in which convictions were made.

CASES AT MAGISTRATES' COURTS(*a*) IN WHICH CONVICTIONS WERE MADE, BY CLASS OF OFFENCE: STATES AND TERRITORIES, 1967(*b*)

Class of offence	*N.S.W.*	*Vic.*	*Qld (c)(d)*	*S.A. (c)*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Against the person	4,021	3,764	853	564	974	422	224	93	10,915
Against property	30,685	22,983	5,917	4,605	9,225	2,720	582	773	77,490
Forgery and offences against the currency	1,103	608	19	11	8	136	12	29	1,926
Against good order	86,868	32,180	32,779	8,954	15,300	1,459	6,194	602	184,336
Other	175,020	226,781	42,703	72,976	47,291	26,788	2,425	4,524	598,508
Total	**297,697**	**286,316**	**82,271**	**87,110**	**72,798**	**31,525**	**9,437**	**6,021**	**873,175**

(*a*) Includes Children's Courts except for Northern Territory. (*b*) Excludes minor traffic offences settled without court appearances. (*c*) Year ended 30 June. (*d*) A person convicted on several counts at the one hearing is included only once.

CASES AT MAGISTRATES' COURTS(*a*) IN WHICH CONVICTIONS WERE MADE STATES AND TERRITORIES, 1963 TO 1967(*b*)

State or Territory	*1963*	*1964*	*1965*	*1966*	*1967*
New South Wales	287,053	301,922	304,053	299,780	297,697
Victoria	266,058	277,877	296,542	279,631	286,316
Queensland(*c*)(*d*)	78,864	88,442	101,955	98,214	82,271
South Australia(*c*)	57,189	55,408	62,238	71,694	87,110
Western Australia	56,778	57,498	64,014	63,489	72,798
Tasmania	29,945	26,686	31,256	32,414	31,525
Northern Territory	(*e*)5,503	(*e*)6,166	(*e*)7,026	(*e*)7,402	9,437
Australian Capital Territory	6,026	5,815	6,688	7,793	6,021
Australia	**787,416**	**819,814**	**873,772**	**860,417**	**873,175**

(*a*) Includes Children's Courts except for Northern Territory. (*b*) Excludes minor traffic offences settled without court appearances. (*c*) Year ended 30 June. (*d*) A person convicted on several counts at the one hearing is included only once. (*e*) Excludes courts at Tennant Creek and Katherine.

Criminal proceedings—cases in which convictions were made for drunkenness. The numbers of cases in which convictions were recorded during each of the years 1963 to 1967 are given in the following table.

DRUNKENNESS: CASES(*a*) IN WHICH CONVICTIONS WERE MADE, STATES AND TERRITORIES, 1963 TO 1967

State or Territory	*1963*	*1964*	*1965*	*1966*	*1967*
New South Wales	65,630	61,537	63,143	56,159	55,134
Victoria	27,576	24,048	23,790	24,279	23,855
Queensland(*b*)	28,580	30,924	29,224	28,791	29,530
South Australia(*b*)	7,485	6,952	7,110	7,334	6,109
Western Australia	7,294	7,910	8,288	9,033	10,722
Tasmania	562	420	491	461	481
Northern Territory	(*c*)1,730	(*c*)3,021	(*c*)3,938	(*c*)3,231	4,598
Australian Capital Territory	237	331	401	377	313
Australia	**139,094**	**135,143**	**136,385**	**129,665**	**130,742**

(*a*) Includes Children's Courts except for Northern Territory. (*b*) Year ended 30 June. (*c*) Excludes courts at Tennant Creek and Katherine.

Civil proceedings. Civil proceedings in the lower courts refer to those in the Small Debts Courts in New South Wales, Courts of Petty Sessions in Victoria, Magistrates' Courts in Queensland, Local Courts in South Australia and Western Australia, Courts of Requests in Tasmania, Local Courts in the Northern Territory, and the Court of Petty Sessions in the Australian Capital Territory. Statistics of civil proceedings in the lower courts are given on page 579.

Higher (judges') courts

Higher courts are presided over by a judge, sometimes with a jury (*see* page 566). The general jurisdiction of the higher courts in the States and Territories, which for this purpose include District, County and Supreme Courts, includes appeals from the lower courts, cases of serious crime committed from lower courts, and civil cases involving common law, commercial causes, equity, etc. Under the *Matrimonial Causes Act* 1959–1966 of the Commonwealth, the Supreme Courts of the various States and Territories have exclusive jurisdiction in matrimonial causes, and under the *Bankruptcy Act* 1966–1968, the Supreme Courts of New South Wales, Queensland, Western Australia, Tasmania and the Northern Territory, and the Courts of Insolvency in Victoria and South Australia, can deal with bankruptcy cases.

Proceedings at higher courts include therefore criminal, civil, divorce, and bankruptcy proceedings. Separate details of each are given on pages 577–88.

An account of the methods adopted in each jurisdiction in connection with habitual offenders is given in Year Book No. 49, pages 668–9.

Capital punishment

There were eight executions in Australia during the period 1955 to 1968. Three took place in South Australia (in 1956, 1958 and 1964), four in Western Australia (one in 1960 and 1961, two in 1964) and one in Victoria in 1967. In each case the offence was murder.

Under *The Criminal Code Amendment Act of* 1922 capital punishment was abolished in Queensland. In New South Wales the Crimes Act was amended in 1955, abolishing capital punishment. The death penalty for piracy with violence is retained in the Piracy Punishment Act 1902. In Tasmania capital punishment was abolished in 1968 by an amendment to the Criminal Code. In the Australian Capital Territory the *Child Welfare Ordinance* 1957–1968 provides that no death sentence is to be pronounced or recorded against a person under the age of 18 years.

In the early days of the history of Australia the penalty of death was attached to a large number of offences, many of which would now be dealt with in a court of summary jurisdiction. The present tendency is to restrict death sentences to persons convicted of murder. Although rape is a capital offence in some States, the penalty of death has not been imposed in recent years on persons convicted of it. The average annual number of executions in Australia from 1861 to 1880 was 9; from 1881 to 1900, 6; from 1901 to 1910, 4; from 1911 to 1920, 2; from 1921 to 1930, 2; from 1931 to 1940, 1; from 1941 to 1950, 0.5; and from 1951 to 1960, 0.7.

Serious crime

Selected crime reported or becoming known to police

The tables on pages 575–6 show some details of certain categories of offences reported or becoming known to police. This series, which commenced in 1964, is derived from police records and is based, as far as possible, on definitions and procedural arrangements uniformly determined for all States. The following explanations are necessary in order to interpret the figures in this series.

Number of offences reported or becoming known. All incidents reported or becoming known to the police which are found to constitute offences within the scope of the crimes covered are included. Offences are shown as 'reported or becoming known' in the year during which it has been established that the incident constitutes a crime, not necessarily in the period when the incident occurred. However, the incident is included when the police are satisfied that a crime has been committed, even though it may be established in subsequent proceedings that no crime or a crime of a different nature was committed. As far as possible, the offences are recorded in respect of the State in which the incident occurred, regardless of which police force undertakes investigations or prosecutions, or where an arrest is made. In the case of homicide, assault, robbery, and rape, one offence is counted in respect of each victim, regardless of the number of offenders involved. In the case of breaking and entering, and fraud, etc., one offence is counted for each act or series of directly related acts occurring at the same time and place and under the same circumstances. Each motor vehicle stolen is counted as constituting a separate offence.

Number of offences cleared. An offence of the type included in this series is counted as 'cleared' when an information (charge, arrest or summons to appear) has been laid against at least one person involved. However, an offence may also be counted as 'cleared' without an information being laid. This may occur when the offender has received an official caution or has died, has committed suicide, has been committed to a mental institution, or is in another jurisdiction from which extradition is not desired or available, or is serving a sentence; or if there are other obstacles to prosecution, such as diplomatic immunity or that the complainant refuses to prosecute. A clearance is always shown against the classification under which the offence was 'reported', regardless of the nature of the charge laid or changes in the description of an offence due to later information. The entries are made in respect of the year when the offence was 'cleared', whether or not the offence was 'reported' in that or an earlier year.

Persons involved in crimes cleared. This is the sum of the number of persons dealt with in each of the offences shown as 'cleared'. If more than one person is involved in the one offence, each person is counted. If the same person is involved in more than one offence cleared, he is counted separately for each offence. Persons involved are shown against the categories of offences to which an incident was originally allocated, regardless of the actual offences they are charged with. This basis of counting 'persons involved in offences cleared' was adopted to reveal trends in crime participation by persons in various age-groups. The figures in this series are not directly comparable with statistics of persons charged or convicted in court, or of cases brought before the courts; nor do these figures reveal the number of offenders in the community.

Offences included in the statistics

Homicide. Separate details are provided for murder, attempted murder (i.e. acts done with intent to murder) and manslaughter (unlawful killing other than murder), excluding manslaughter arising from motor traffic accidents.

Serious assault. These are assaults normally dealt with on indictment. Includes woundings, offences causing bodily harm, assaults with a weapon, etc., and attempts of this nature. Excludes sexual assault and robbery. *Uniform interpretation of this definition between States is especially difficult to effect.*

Robbery. Stealing anything, if at or immediately before or after the time of stealing the offender uses or threatens to use violence to any person or property in order to obtain the thing stolen, or to prevent or overcome resistance to its being stolen. Includes attempts of this nature.

Rape. Includes attempted rape and assault with intent to rape. Excludes unlawful carnal knowledge (i.e. where consent is given, but the girl is below the legal age of consent, etc.) and indecent assault.

Breaking and entering. Breaking and entering a building (or entering a building and breaking out) *and* committing or intending to commit a crime. Includes burglaries. Separate details are shown according to the type of building involved, namely, *dwellings* (including unoccupied dwellings, tents, caravans, etc., used as dwellings, and the residential parts of hotels, schools, etc.); *shops* (including kiosks, service stations, restaurants, bars, non-residential clubs, etc.); and *offices, factories and warehouses* (including parts of buildings, but excluding dwellings and shops used for such purposes). Includes attempts. From 1967 the figures exclude breakings involving property valued at $100 or less.

Motor vehicle thefts, illegal use, etc. Includes all offences of illegal, unlawful or unauthorised use, use without consent, unlawfully assuming control, etc., no matter under which legislation these offences are prescribed. Excludes cases of 'interference', but includes attempts at illegal use. The number of stolen motor vehicles which are recovered is also shown.

Fraud, forgery, false pretences. Includes embezzlement, 'omit to account', misappropriation, fraudulent appropriation, conversion, larceny as bailee, falsification of accounts, company fraud, forgery, uttering, false pretences, passing of valueless cheques and offences by trustees. Includes attempts, but excludes imposition. As a general rule, offences are included only if there is an element of deception or trickery. Separate details are shown for *valueless cheque* offences (i.e. passing of valueless cheques, whether there is no account, insufficient funds or a false signature of the purported drawer of the cheque. However, this sub-group excludes cases where a genuine cheque is altered or the endorsement of the payee is forged. These cases are regarded as forgery and or uttering and included in 'other').

Number of offences reported or becoming known to police

The following table shows, for each State and Territory, the number of offences in each of the seven categories covered by this series which were reported or became known to police during the years 1964 to 1968.

SELECTED CRIME REPORTED OR BECOMING KNOWN TO POLICE NUMBER OF OFFENCES, STATES AND TERRITORIES, 1964 TO 1968

Category of crime	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Homicide—									
1964	109	72	56	14	10	4	6	1	272
1965	111	81	34	14	13	7	6	5	271
1966	113	106	62	13	14	3	8	2	321
1967	139	57	47	25	7	7	17	1	300
1968	140	52	51	18	14	10	12	3	300
Serious assault(*a*)—									
1964	545	1,208	61	34	33	27	9	7	1,924
1965	484	1,243	49	53	13	19	13	21	1,895
1966	522	1,529	82	53	14	3	11	13	2,227
1967	547	1,338	119	71	20	11	39	13	2,158
1968	611	1,600	128	52	60	19	15	23	2,508
Robbery—									
1964	211	252	53	37	22	17	..	..	592
1965	283	302	72	32	17	18	1	5	730
1966	346	457	92	50	20	17	4	6	992
1967	386	395	79	51	21	18	5	5	960
1968	544	480	88	79	48	23	6	12	1,280
Rape—									
1964	91	94	33	21	6	11	2	4	262
1965	67	93	46	23	13	8	2	5	257
1966	72	107	38	16	7	2	8	1	251
1967	72	138	32	43	5	17	2	2	311
1968	95	168	34	43	5	7	7	4	363
Breaking and entering (dwellings, shops, offices, etc.)—									
1964	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	(*b*)39,695
1965									(*b*)46,626
1966									(*b*)56,841
1967(*c*)	7,806	7,656	1,417	1,165	552	340	40	96	19,072
1968(*c*)	11,026	8,069	1,841	1,181	883	422	54	86	23,562
Motor vehicle theft, etc.—									
1964	11,512	7,269	1,711	1,372	1,153	353	45	124	23,539
1965	12,214	6,967	1,792	1,472	1,141	424	83	192	24,285
1966	12,678	8,969	1,703	1,304	1,572	410	89	212	26,937
1967	12,558	8,348	1,544	1,701	1,707	603	119	211	26,791
1968	13,008	9,352	1,740	1,967	2,084	759	192	196	29,298
Fraud, forgery, etc.—									
1964	5,688	3,828	2,634	2,091	1,020	293	85	69	15,708
1965	6,311	4,132	3,331	1,617	1,075	371	104	258	17,199
1966	5,558	3,779	2,778	1,740	1,052	182	144	276	15,509
1967	5,438	3,367	2,872	2,185	1,256	292	143	270	15,823
1968	6,283	4,402	4,154	1,596	1,476	607	271	166	18,955

(*a*) *See* definition on page 574. (*b*) All reported breakings, etc. (*c*) Excludes offences involving property valued at $100 or less.

Crimes cleared and persons involved

The tables which follow show, for the various categories of offences, the number of offences reported, the number cleared, and the number of persons involved according to age and sex. Subdivisions of the categories homicide, breaking and entering, and fraud, etc., are provided. *See pages 573–4 for definitions used and the bases on which these statistics are prepared.*

HOMICIDE: CRIMES REPORTED OR BECOMING KNOWN, CRIMES CLEARED AND PERSONS INVOLVED, AUSTRALIA, 1966 TO 1968

	Murder			*Attempted murder*			*Manslaughter*			*All homicide*		
	1966	*1967*	*1968*	*1966*	*1967*	*1968*	*1966*	*1967*	*1968*	*1966*	*1967*	*1968*
Number reported or becoming known	163	137	143	129	127	114	29	36	43	321	300	300
Number cleared	149	127	140	121	116	105	29	36	42	299	279	287
Persons involved in crimes cleared—												
Aged(*a*)—												
16 years and under	6	4	7	10	3	8	2	2	..	18	9	15
17 and 18 years	9	7	10	7	4	6	3	2	2	19	13	18
19 and 20 years	12	7	12	10	7	8	3	2	6	25	16	26
21 years and over	134	121	136	101	104	98	27	31	38	262	256	272
Total persons involved	*161*	*139*	*165*	*128*	*118*	*120*	*35*	*37*	*46*	*(b)324*	*(b)294*	*(b)331*

(*a*) Age last birthday at time of clearance. (*b*) Includes 41 females in 1966, 46 in 1967, and 44 in 1968.

SERIOUS ASSAULT, ROBBERY, RAPE: CRIMES REPORTED OR BECOMING KNOWN, CRIMES CLEARED, AND PERSONS INVOLVED, AUSTRALIA, 1966 TO 1968

	Serious assault			*Robbery*			*Rape*		
	1966	*1967*	*1968*	*1966*	*1967*	*1968*	*1966*	*1967*	*1968*
Number reported or becoming known	2,227	2,158	2,508	992	960	1,280	251	311	363
Number cleared	1,838	1,748	1,987	424	425	459	205	228	281
Persons involved in crimes cleared—									
Aged(*a*)—									
16 years and under	150	111	156	110	108	105	38	22	48
17 and 18 years	271	238	267	136	161	160	89	111	99
19 and 20 years	345	271	271	118	121	164	79	90	99
21 years and over	1,363	1,365	1,501	335	306	411	124	205	187
Total persons involved	*(b)2,129*	*(b)1,985*	*(b)2,195*	*(c)699*	*(c)696*	*(c)840*	*330*	*428*	*433*

(*a*) Age last birthday at time of clearance. (*b*) Includes 114 females in 1966, 85 in 1967, and 106 in 1968. (*c*) Includes 35 females in 1966, 26 in 1967, and 38 in 1968.

BREAKING AND ENTERING: CRIMES REPORTED OR BECOMING KNOWN, CRIMES CLEARED, AND PERSONS INVOLVED, AUSTRALIA, 1966 TO 1968

	Dwellings			*Shops*			*Offices and warehouses*			*Total*		
	1966 (a)	*1967 (b)*	*1968 (b)*	*1966 (a)*	*1967 (b)*	*1968 (b)*	*1966 (a)*	*1967 (b)*	*1968 (b)*	*1966 (a)*	*1967 (b)*	*1968 (b)*
Number reported or becoming known	22,186	8,205	11,434	18,743	6,030	6,585	15,912	4,837	5,543	56,841	19,072	23,562
Number cleared	5,954	1,738	2,221	4,788	1,367	1,354	3,924	983	1,057	14,666	4,088	4,632
Persons involved in crimes cleared—												
Aged(*c*)—												
16 years and under	4,023	602	893	3,144	506	452	3,065	276	410	10,232	1,384	1,755
17 and 18 years	1,325	416	394	1,573	387	400	850	189	239	3,748	992	1,033
19 and 20 years	808	417	326	997	438	343	570	210	224	2,375	1,065	893
21 years and over	2,251	1,086	1,427	2,430	874	928	1,888	831	731	6,569	2,791	3,086
Total persons involved	*8,407*	*2,521*	*3,040*	*8,144*	*2,205*	*2,123*	*6,373*	*1,506*	*1,604*	*(d)22,924*	*(d)6,232*	*(d)6,767*

(*a*) All reported offences. (*b*) Excludes offences involving property valued at $100 or less. (*c*) Age last birthday at time of clearance. (*d*) Includes 447 females in 1966, 195 in 1967, and 174 in 1968.

MOTOR VEHICLE THEFT, ETC., FRAUD, ETC.: CRIMES REPORTED OR BECOMING KNOWN, CRIMES CLEARED, AND PERSONS INVOLVED, AUSTRALIA, 1966 TO 1968

	Motor vehicles theft, etc.			*Fraud, forgery, false pretences*								
				Valueless cheques			*Other*			*All frauds, etc.*		
	1966	*1967*	*1968*	*1966*	*1967*	*1968*	*1966*	*1967*	*1968*	*1966*	*1967*	*1968*
Number reported or becoming known	26,937	26,791	29,298	7,277	7,127	7,787	8,232	8,696	11,168	15,509	15,823	18,955
Number cleared	5,640	6,039	6,218	5,739	5,063	5,784	7,483	7,681	9,935	13,222	12,744	15,719
Persons involved in crimes cleared—												
Males aged (*a*)—												
16 years and under	3,535	3,774	3,747	76	69	105	344	219	186	420	288	291
17 and 18 years	2,559	2,413	2,298	186	146	186	251	258	235	437	404	421
19 and 20 years	1,181	1,168	1,165	266	387	242	409	260	496	675	647	738
21 years and over	1,696	1,799	1,944	4,635	4,034	4,810	5,146	4,777	7,565	9,781	8,811	12,375
Total males	8,971	9,154	9,154	5,163	4,636	5,343	6,150	5,514	8,482	11,313	10,150	13,825
Females aged(*a*)—												
16 years and under	80	68	57	16	1	22	144	127	83	160	128	105
17 and 18 years	38	21	39	39	60	26	205	143	140	244	203	166
19 and 20 years	19	20	58	97	46	23	252	343	475	349	389	498
21 years and over	26	18	95	544	621	590	876	1,902	1,065	1,420	2,523	1,655
Total females	163	127	249	696	728	661	1,477	2,515	1,763	2,173	3,243	2,424
Total persons involved	*9,134*	*9,281*	*9,403*	*5,859*	*5,364*	*6,004*	*7,627*	*8,029*	*10,245*	*13,486*	*13,393*	*16,249*

(*a*) Age last birthday at time of clearance.

The number of stolen motor vehicles recovered was: 1966, 24,490; 1967, 24,701; 1968, 27,191.

Convictions for serious crime at lower (magistrates') courts

The figures given in the tables on page 572 refer to all convictions, and include offences of a technical nature, drunkenness, and minor breaches of good order, which come under the heading of crime in a very different sense from the more serious offences. The following table has therefore been prepared to show convictions at magistrates' courts for the years 1963 to 1967 for what may be regarded as the more serious offences, i.e. offences against the person, offences against property, forgery, and offences against the currency.

CONVICTIONS FOR SERIOUS CRIME(*a*) AT MAGISTRATES' COURTS(*b*): STATES AND TERRITORIES, 1963 TO 1967

State or Territory	*1963*	*1964*	*1965*	*1966*	*1967*
New South Wales	32,656	31,826	34,585	34,911	35,809
Victoria	21,540	23,131	23,785	25,804	27,355
Queensland(*c*)(*d*)	5,768	5,707	6,160	6,900	6,789
South Australia(*c*)	3,727	4,145	4,813	5,085	5,180
Western Australia	8,450	8,017	7,991	9,357	10,207
Tasmania	1,570	2,122	3,670	3,285	3,278
Northern Territory	(*e*)591	(*e*)469	(*e*)627	(*e*)647	818
Australian Capital Territory	492	480	627	761	895
Australia	**74,794**	**75,897**	**82,258**	**86,750**	**90,331**

(*a*) Offences against the person, offences against property, forgery, and offences against the currency. (*b*) Includes Children's Courts except for Northern Territory. (*c*) Year ended 30 June. (*d*) A person convicted on several counts at the one hearing is included only once. (*e*) Excludes courts at Tennant Creek and Katherine.

Committals to higher (judges') courts

COMMITTALS TO HIGHER COURTS(*a*), BY CLASS OF OFFENCE: STATES AND TERRITORIES, 1967

Class of offence	*N.S.W.*	*Vic.*	*Qld (b)(c)*	*S.A. (b)*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Against the person	1,500	1,128	398	274	96	119	44	45	3,604
Against property	6,016	3,056	1,184	396	455	399	93	105	11,704
Forgery and offences against the currency	221	561	10	25	36	19	29	13	914
Against good order	180	82	12	10	15	3	..	..	302
Other	37	828	7	8	7	9	10	7	913
Total	**7,954**	**5,655**	**1,611**	**713**	**609**	**549**	**176**	**170**	**17,437**

(*a*) Includes committals from Children's Court except for Northern Territory. (*b*) Year ended 30 June. (*c*) A person committed on several counts at the one hearing is included only once.

COMMITTALS TO HIGHER COURTS(*a*): STATES AND TERRITORIES, 1963 TO 1967

State or Territory	*1963*	*1964*	*1965*	*1966*	*1967*
New South Wales	8,538	7,575	7,908	8,758	7,954
Victoria	5,306	5,343	4,745	5,308	5,655
Queensland(*b*)(*c*)	1,354	1,270	1,477	1,614	1,611
South Australia(*b*)	600	602	753	737	713
Western Australia	544	474	515	523	609
Tasmania	705	610	414	486	549
Northern Territory	(*d*)107	(*d*)65	(*d*)169	(*d*)127	176
Australian Capital Territory	92	177	224	137	170
Australia	**17,246**	**16,116**	**16,205**	**17,690**	**17,437**

(*a*) Includes committals from the Children's Court except for Northern Territory. (*b*) Year ended 30 June. (*c*) A person committed on several counts at the one hearing is included only once. (*d*) Excludes courts at Tennant Creek and Katherine.

Persons convicted at higher (judges') courts

PERSONS CONVICTED(*a*) AT HIGHER COURTS, BY NATURE OF OFFENCE: STATES AND TERRITORIES, 1967

Offence	*N.S.W.*	*Vic.*	*Qld (b)*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Against the person—									
Murder	15	8	8	1	1	..	1	..	34
Attempted murder	3	1	3	2	2	..	..	..	11
Manslaughter(*c*)	24	22	19	9	8	1	3	1	87
Culpable driving	39	..	22	1	..	6	..	2	70
Rape	35	17	26	10	9	5	..	..	102
Other offences against females	302	254	98	163	9	60	6	12	904
Abduction	2	7	1	1	..	..	..	..	11
Unnatural offences	73	51	11	16	7	17	3	5	183
Abortion and attempt to procure	1	..	..	1	2	1	..	..	5
Bigamy	8	2	..	..	1	..	..	..	11
Malicious wounding and aggravated assault	135	46	53	18	..	9	5	5	271
Common assault	56	22	1	2	24	3	4	1	113
Other offences against the person	6	47	2	1	..	..	..	..	56
Total, against the person	*699*	*477*	*244*	*225*	*63*	*102*	*22*	*26*	*1,858*
Against property—									
Burglary, breaking and entering	1,298	372	684	358	211	82	25	19	3,049
Robbery and stealing from the person	143	107	33	14	10	49	1	..	357
Embezzlement and larceny by servants	87	43	8	7	17	1	..	2	165
Other larceny(*d*)	604	214	204	19	5	..	5	14	1,065
Receiving	117	55	43	4	9	3	..	3	234
Fraud and false pretences	81	36	3	19	26	8	2	2	177
Arson	2	18	12	1	..	3	..	..	36
Malicious damage	25	18	4	..	..	..	5	..	52
Other offences against property	7	1	16	..	2	..	..	1	27
Total, against property	*2,364*	*864*	*1,007*	*422*	*280*	*146*	*38*	*41*	*5,162*
Forgery and offences against the currency	24	76	10	21	7	4	4	2	148
Against good order	2	21	11	..	1	..	1	..	36
Other	37	348	7	39	6	2	..	..	439
Grand total	**3,126**	**1,786**	**1,279**	**707**	**357**	**254**	**65**	**69**	**7,643**

(*a*) A person convicted on several counts at the one hearing is classified according to the most serious offence and is included only once. (*b*) Year ended 30 June. (*c*) Includes causing death by dangerous driving. (*d*) Includes unlawfully using vehicles.

PERSONS CONVICTED(*a*) AT HIGHER COURTS: STATES AND TERRITORIES, 1963 TO 1967

State or Territory	*1963*	*1964*	*1965*	*1966*	*1967*
New South Wales	2,907	2,689	2,900	3,201	3,126
Victoria	1,946	1,793	1,618	1,725	1,786
Queensland(*b*)	1,187	1,134	1,201	1,330	1,279
South Australia	745	629	713	738	707
Western Australia	313	259	315	302	357
Tasmania	293	172	170	204	254
Northern Territory	56	41	76	58	65
Australian Capital Territory	51	66	85	67	69
Australia	**7,498**	**6,783**	**7,078**	**7,625**	**7,643**

(*a*) *See* note (*a*) above. (*b*) Year ended 30 June.

Civil cases

The statistics in the two tables in this section are influenced by factors which affect comparability between States and between courts. The total number of plaints entered and amounts awarded plaintiffs in the lower courts during 1967 are shown in the following table.

CIVIL CASES AT LOWER COURTS: STATES AND TERRITORIES, 1967

		N.S.W.	*Vic.*	*Qld (a)*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Plaints entered	number	165,941	204,336	56,759	96,145	55,559	38,276	3,142	6,772	626,930
Amounts awarded to plaintiffs	$'000	5,628	17,050	3,818	4,767	2,822	1,314	179	295	35,873

(*a*) Year ended 30 June.

The following table shows the civil judgments (excluding those for divorce and bankruptcy) in the higher courts during 1967. The particulars given below include the number and amount of judgments entered by default or confession or agreement.

CIVIL CASES AT HIGHER COURTS: STATES AND TERRITORIES, 1967

		N.S.W. (a)	*Vic.*	*Qld (b)*	*S.A.*	*W.A. (c)*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Judgments .	number	50,197	9,437	838	182	633	n.a.	n.a.	692	n.a.
Amounts awarded	$'000	n.a.	7,617	4,210	1,383	5,770	n.a.	n.a.	1,563	n.a.

(*a*) Excludes Common Law Jurisdiction. (*b*) Year ended 30 June. (*c*) Judgments signed and entered.

Transactions of the High Court

TRANSACTIONS OF THE HIGH COURT OF AUSTRALIA, 1967 AND 1968

Original jurisdiction(a)	*1967*	*1968*	*Appellate jurisdiction*	*1967*	*1968*
Number of writs issued . .	74	98	Number of appeals set down for hearing	114	89
Number of causes entered for trial	46	43			
Judgments for plaintiffs . .	6	7	Number allowed . . .	27	49
Judgments for defendants .	7	3			
Otherwise disposed of . .	19	21	Number dismissed . .	67	70
Amounts of judgments . .	$74,175	$441,760	Otherwise disposed of . .	25	20

(*a*) Some matters dealt with by the High Court neither originate as writs nor are entered as causes.

During 1967 and 1968, respectively, the High Court dealt also with the following: appeals from assessments under the Taxation Assessment Acts, 55, 19; special cases stated for the opinion of the Full Court, 4, 6; applications for prohibition, etc., 15, 5. The fees collected amounted to $7,327 in 1967 and $16,764 in 1968.

Divorce and other matrimonial causes

Separation and maintenance orders of courts of summary jurisdiction

In all States and Territories there are laws enabling a wife whose husband leaves her or the children of the marriage without adequate means of support to obtain a maintenance order against the husband from a court of summary jurisdiction. In some States and in the Northern Territory, courts of summary jurisdiction also have power to make separation orders. A separation order is intended primarily for the protection of the person of the wife.

Divorce and other matrimonial proceedings in higher courts

A marriage may be terminated by a Supreme Court of a State or Territory, under powers vested in these courts by Commonwealth legislation, in one of three ways. Firstly, there may be a dissolution of the marriage, commonly known as divorce; secondly, the courts may annul a marriage; and thirdly, there can be a judical separation of the parties. Until the Commonwealth *Matrimonial Causes Act* 1959 came into operation each State was primarily responsible for legislation relating to matrimonial causes. The law varied from State to State, for example, as to the period of desertion needed to obtain a decree for the dissolution of marriage. In 1959, however, the Commonwealth Matrimonial Causes Act was passed, and it came into force on 1 February 1961. The Act establishes uniform grounds throughout the whole of the Commonwealth for the termination of marriage. While the Act displaces corresponding State law, it vests jurisdiction in existing State and Territorial Courts.

Matrimonial Causes Act 1959-1966

Under this Act a decree for the dissolution of marriage may be granted on one or more of fourteen grounds, which include adultery, desertion, separation for five years in certain circumstances, cruelty, drunkenness, and failure to comply with a restitution decree.

Proceedings for nullity of marriage may be instituted in respect of a marriage which is void or voidable. A marriage which is void has no existence at all, and so it is not legally necessary to obtain a decree of nullity of marriage, but since the issue may depend on difficult questions of fact, such as proof that the consent of one of the parties to the marriage was not a real consent, it is advisable and customary to seek a court judgment which decides the question of the validity of the marriage.

Proceedings for annulling a voidable marriage may be instituted on various grounds, as, for example, where at the time of the marriage either party was a mental defective. A voidable marriage is void from the date of the decree absolute, but until then the parties have the status of married people and transactions concluded on the basis of the existence of that status cannot be undone or re-opened. Since the parties to a marriage which is void or which has been voided do not have the status of married people, they may remarry.

The death of either husband or wife terminates any proceedings under the Act. A decree for dissolution or annulment of a voidable marriage is first a decree *nisi*. The decree automatically becomes absolute at the expiration of three months, unless it is in the meantime rescinded, appeal proceedings are instituted, or there are children of the marriage under the age of 16, in which case the Court must be satisfied that appropriate arrangements have been made for their welfare before the decree will become absolute. The parties cannot remarry until a decree *nisi* has become absolute.

A decree of judical separation is available on most of the grounds available for divorce. It leaves unimpaired the status of marriage, but suspends rights and duties with respect to cohabitation. A husband is not responsible for the acts of his wife, except that he is liable for necessaries supplied to her if he has failed to pay maintenance ordered by a court. Persons who have judicially separated cannot remarry, but a divorce may be obtained on the same facts as those on which the decree of judicial separation was based.

The Act provides for financial grants to approved marriage guidance organisations and the courts are enjoined to consider at all times the possibility of reconciliation and they may take certain steps to endeavour to effect a reconciliation.

Number of petitions filed

The following table shows the number of petitions for dissolution of marriage, nullity of marriage and judicial separation filed in each State and Territory during 1968.

PETITIONS FILED FOR DISSOLUTION OF MARRIAGE, NULLITY OF MARRIAGE AND JUDICIAL SEPARATION: STATES AND TERRITORIES, 1968

Petition for—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T*	*Aust.*
Dissolution of marriage—									
Husband petitioner	2,025	1,112	609	422	485	197	33	63	4,946
Wife petitioner	3,533	1,659	855	764	510	208	26	118	7,673
Total	*5,558*	*2,771*	*1,464*	*1,186*	*995*	*405*	*59*	*181*	*12,619*
Nullity of marriage—									
Husband petitioner	7	5	2	..	2	1	..	1	18
Wife petitioner	21	5	4	5	3	1	..	2	41
Total	*28*	*10*	*6*	*5*	*5*	*2*	..	*3*	*59*
Dissolution or nullity—									
Husband petitioner	1	6	..	..	..	..	..	..	7
Wife petitioner	4	10	4	1	..	..	..	..	19
Total	*5*	*16*	*4*	*1*	..	..	..	..	*26*
Judicial separation—									
Wife petitioner	7	6	6	8	3	1	..	6	37
Total	*7*	*6*	*6*	*8*	*3*	*1*	..	*6*	*37*
Dissolution or judicial separation—									
Wife petitioner	..	..	..	1	..	..	..	..	1
Total	..	..	..	*1*	..	..	..	..	*1*
Total petitions—									
Husband petitioner . No.	2,033	1,123	611	422	487	198	33	64	4,971
per cent	36	40	41	35	49	49	(*a*)	(*a*)	39
Wife petitioner . No.	3,565	1,680	869	779	516	210	26	126	7,771
per cent	64	60	59	65	51	51	(*a*)	(*a*)	61
Grand total	**5,598**	**2,803**	**1,480**	**1,201**	**1,003**	**408**	**59**	**190**	**12,742**

(*a*) Percentages not shown because of small number of cases involved.

Number of decrees granted

The following table shows the number of dissolutions of marriage, nullities of marriage and judicial separations granted in each State and Territory during 1968 classified according to petitioner.

DISSOLUTIONS OF MARRIAGE, NULLITIES OF MARRIAGE AND JUDICIAL SEPARATIONS GRANTED: STATES AND TERRITORIES, 1968

Decree for—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Dissolution of marriage(*a*)—									
Husband petitioner	1,756	1,048	467	336	365	153	14	52	4,191
Wife petitioner	3,122	1,465	668	579	447	149	9	97	6,536
Petition by both	2	2	..	..	..	..	..	..	4
Total	*4,880*	*2,515*	*1,135*	*915*	*812*	*302*	*23*	*149*	*10,731*
Nullity of marriage(*b*)—									
Husband petitioner	10	4	1	2	..	1	..	..	18
Wife petitioner	14	6	3	2	..	..	..	1	26
Total	*24*	*10*	*4*	*4*	..	*1*	..	*1*	*44*
Judicial separation—									
Wife petitioner	7	..	1	3	..	..	..	3	14
Total	*7*	..	*1*	*3*	..	..	..	*3*	*14*
Total decrees—									
Husband petitioner . No.	1,766	1,052	468	338	365	154	14	52	4,209
per cent	36	42	41	37	45	51	(*c*)	(*c*)	39
Wife petitioner . No.	3,143	1,471	672	584	447	149	9	101	6,576
per cent	64	58	59	63	55	49	(*c*)	(*c*)	61
Petition by both . No.	2	2	..	..	..	..	..	..	4
Grand total	**4,911**	**2,525**	**1,140**	**922**	**812**	**303**	**23**	**153**	**10,789**

(*a*) Decrees absolute. (*b*) Final decrees. (*c*) Percentages not shown because of small number of cases involved.

The following table shows the number of dissolutions of marriage, nullities of marriage and judicial separations granted in each State and Territory for each year from 1964 to 1968.

DISSOLUTIONS OF MARRIAGE, NULLITIES OF MARRIAGE AND JUDICIAL SEPARATIONS GRANTED: STATES AND TERRITORIES, 1964 TO 1968

State or Territory	*1964*	*1965*	*1966*	*1967*	*1968*
DISSOLUTIONS OF MARRIAGE(*a*)					
New South Wales	3,024	3,440	4,515	4,555	4,880
Victoria	2,130	2,089	2,131	2,039	2,515
Queensland	981	1,052	1,031	1,074	1,135
South Australia	887	852	1,069	929	915
Western Australia	542	604	637	726	812
Tasmania	229	279	317	248	302
Northern Territory	31	41	58	20	23
Australian Capital Territory	93	134	101	97	149
Australia	*7,917*	*8,491*	*9,859*	*9,688*	*10,731*
NULLITIES OF MARRIAGE(*b*)					
New South Wales	14	14	19	17	24
Victoria	19	13	11	15	10
Queensland	5	3	7	6	4
South Australia	3	3	9	9	4
Western Australia	2	2	3	1	..
Tasmania	1	..	1	..	1
Northern Territory	..	..	..	..	..
Australian Capital Territory	..	..	..	2	1
Australia	*44*	*35*	*50*	*50*	*44*
JUDICIAL SEPARATIONS					
New South Wales	3	1	4	2	7
Victoria	2	1	2	..	..
Queensland	..	4	1	3	1
South Australia	..	..	2	3	3
Western Australia	1	..	..	..	..
Tasmania	..	1	1	..	..
Northern Territory	..	..	..	..	..
Australian Capital Territory	..	1	2	..	3
Australia	*6*	*8*	*12*	*8*	*14*
TOTAL DECREES GRANTED					
Australia	**7,967**	**8,534**	**9,921**	**9,746**	**10,789**

(*a*) Decrees absolute. (*b*) Final decrees.

The ten-year averages of the numbers of decrees (i.e. dissolutions, nullities and judicial separations) granted annually in Australia for the 80 years from 1881 to 1960 are as follows:

1881–90	1891–1900	1901–10	1911–20	1921–30	1931–40	1941–50	1951–60
70	357	399	741	1,692	2,508	6,187	6,973

Grounds on which decrees were granted

The grounds on which dissolutions of marriage, nullities of marriage and judicial separations were granted in each State and Territory during 1968 are shown in the following table.

DISSOLUTIONS OF MARRIAGE, NULLITIES OF MARRIAGE AND JUDICIAL SEPARATIONS GRANTED: GROUNDS, STATES AND TERRITORIES, 1968

Ground	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
DISSOLUTIONS OF MARRIAGE									
Single grounds—									
Desertion	2,327	1,221	559	339	255	113	7	42	4,863
Adultery.	1,032	674	198	264	301	85	5	52	2,611
Separation	765	512	254	137	204	69	4	14	1,959
Cruelty	400	36	68	114	22	6	1	23	670
Drunkenness	75	19	25	19	9	2	..	1	150
Failure to pay maintenance	3	..	..	..	7	..	..	..	10
Non-compliance with restitution decree . .	2	..	..	1	1	..	..	1	5
Refusal to consummate .	17	15	3	3	..	..	..	1	39
Insanity	2	2	..	3	..	..	..	..	7
Frequent convictions .	8	6	1	2	1	..	..	..	18
Other single grounds .	10	6	3	..	1	1	..	..	21
Dual grounds—									
Desertion and adultery .	40	7	10	3	4	4	..	..	68
Desertion and separation .	42	4	4	19	1	15	3	..	88
Desertion and cruelty .	35	3	..	1	2	1	1	1	44
Desertion and drunkenness	11	1	1	3	..	..	..	..	16
Desertion and failure to pay maintenance . .	4	1	..	..	1	..	..	..	6
Desertion and other . .	2	2	..	..	..	1	..	..	5
Adultery and cruelty .	6	1	2	2	..	..	..	1	12
Adultery and other .	..	..	..	..	..	2	1	..	3
Separation and refusal to consummate . .	..	..	1	..	..	..	..	..	1
Cruelty and drunkenness .	87	5	6	4	3	2	1	10	118
Cruelty and other .	2	..	..	..	..	..	..	..	2
Other dual grounds .	2	..	..	..	..	..	..	..	2
Three grounds or more .	8	..	..	1	..	1	..	3	13
Total . . .	*4,880*	*2,515*	*1,135*	*915*	*812*	*302*	*23*	*149*	*10,731*
NULLITIES OF MARRIAGE									
Bigamy	13	2	1	1	..	..	..	1	18
Invalid marriage . .	..	..	1	1	..	..	..	..	2
Incapacity to consummate .	10	8	2	2	..	1	..	..	23
Unsound mind . . .	1	..	..	..	..	..	..	..	1
Total	*24*	*10*	*4*	*4*	..	*1*	..	*1*	*44*
JUDICIAL SEPARATIONS									
Desertion	1	..	..	..	..	..	..	..	1
Adultery	4	..	..	3	..	..	..	1	8
Cruelty	2	..	..	..	..	..	..	..	2
Desertion and adultery .	..	..	..	..	..	..	..	1	1
Cruelty and drunkenness .	..	..	1	..	..	..	..	1	2
Total	*7*	..	*1*	*3*	..	..	..	*3*	*14*
TOTAL DECREES GRANTED									
Grand total . .	4,911	2,525	1,140	922	812	303	23	153	10,789

Ages of husband and wife at time of marriage

The following table shows the *ages at time of marriage* of husbands and wives who were parties to marriages dissolved in 1968.

DISSOLUTIONS, BY AGES OF PARTIES AT TIME OF MARRIAGE AUSTRALIA, 1968

Age of husband (years)	*Age of wife (years)*											
	Under 20	*20–24*	*25–29*	*30–34*	*35–39*	*40–44*	*45–49*	*50–54*	*55–59*	*60 and over*	*Not stated*	*Total husbands*
Under 20	771	154	14	1	..	..	..	..	..	..	..	940
20–24	2,285	2,654	285	39	11	4	1	..	..	..	..	5,279
25–29	542	1,348	524	111	35	4	2	2	..	..	1	2,569
30–34	118	359	252	145	57	19	2	..	..	..	1	953
35–39	22	100	107	81	82	31	12	1	1	..	..	437
40–44	4	32	38	52	42	46	11	8	1	..	..	234
45–49	3	12	11	23	28	34	25	7	1	1	..	145
50–54	1	1	9	10	12	15	15	9	6	..	..	78
55–59	..	1	1	1	4	12	7	18	5	..	..	49
60 and over	..	..	1	1	2	3	7	7	10	16	..	47
Not stated	..	..	..	..	..	..	..	..	..	..	..	..
Total wives	**3,746**	**4,661**	**1,242**	**464**	**273**	**168**	**82**	**52**	**24**	**17**	**2**	**10,731**

Ages of husband and wife at time of dissolution of marriage

The following table shows the *ages at the time the decree became absolute* of husbands and wives who were parties to marriages dissolved in 1968.

DISSOLUTIONS, BY AGES OF PARTIES AT TIME OF DISSOLUTION OF MARRIAGE AUSTRALIA, 1968

Age of husband (years)	*Age of wife (years)*											
	Under 20	*20–24*	*25–29*	*30–34*	*35–39*	*40–44*	*45–49*	*50–54*	*55–59*	*60 and over*	*Not stated*	*Total husbands*
Under 20	..	1	..	..	..	..	..	..	..	..	..	1
20–24	9	293	38	3	..	..	..	..	..	..	..	343
25–29	3	618	954	68	12	1	1	..	..	..	..	1,657
30–34	..	121	853	724	88	16	2	3	..	1	..	1,808
35–39	..	16	207	665	644	123	21	5	3	1	1	1,686
40–44	..	4	48	205	623	602	154	15	5	3	..	1,659
45–49	..	1	18	53	182	547	469	100	23	4	..	1,397
50–54	..	1	6	9	45	152	350	314	63	13	..	953
55–59	..	..	3	9	19	63	120	207	176	40	1	638
60 and over	..	..	2	2	5	11	60	110	143	256	..	589
Not stated	..	..	..	..	..	..	..	..	..	..	..	..
Total wives	**12**	**1,055**	**2,129**	**1,738**	**1,618**	**1,515**	**1,177**	**754**	**413**	**318**	**2**	**10,731**

Duration of marriages dissolved and number of children

The following table shows the number of dissolutions of marriage granted in 1968, classified according to the legal duration of the marriage (i.e. the period from the date of marriage to the date when the decree *nisi* was made absolute) and number of children.

DISSOLUTIONS, BY DURATION OF MARRIAGES DISSOLVED AND NUMBER OF CHILDREN: AUSTRALIA, 1968

Duration of marriage (years)	*Dissolutions of marriages with*												*Total dissolutions of marriage*	*Total children (a)*
	No children	*1 child*	*2 children*	*3 children*	*4 children*	*5 children*	*6 children*	*7 children*	*8 children*	*9 children*	*10 children*	*11 children*		
Under 1 year . .	1	..	..	..	..	..	..	..	..	..	..	..	1	..
1 year and under 2	19	5	..	1	..	..	..	..	..	..	..	..	25	8
2 years and under 3	71	8	2	..	..	..	..	..	..	..	..	..	81	12
3 ,, ,, ,, 4	143	50	12	1	1	..	..	..	..	..	..	..	207	81
4 ,, ,, ,, 5	322	170	36	13	1	1	..	..	..	..	..	..	543	290
5 ,, ,, ,, 6	313	256	78	12	2	3	..	..	..	..	..	..	664	471
6 ,, ,, ,, 7	274	211	123	23	3	..	2	1	..	..	..	..	637	557
7 ,, ,, ,, 8	228	231	163	42	5	3	..	..	..	..	..	..	672	718
8 ,, ,, ,, 9	165	164	169	49	8	1	..	..	..	..	..	..	556	686
9 ,, ,, ,, 10	149	131	142	53	14	6	..	..	..	..	..	..	495	660
10 ,, ,, ,, 11	132	127	124	70	21	2	1	..	..	..	..	..	477	685
11 ,, ,, ,, 12	105	114	132	59	17	5	..	..	1	..	..	..	433	656
12 ,, ,, ,, 13	94	92	119	69	28	13	1	..	..	..	..	..	416	720
13 ,, ,, ,, 14	84	78	117	79	39	8	4	1	..	..	..	..	410	776
14 ,, ,, ,, 15	79	70	119	73	33	18	2	..	..	..	..	..	394	761
15 ,, ,, ,, 16	79	56	109	86	29	11	4	2	1	..	..	..	377	749
16 ,, ,, ,, 17	63	57	98	73	39	12	8	1	1	..	..	..	352	751
17 ,, ,, ,, 18	59	68	87	67	35	10	5	1	1	..	..	..	333	678
18 ,, ,, ,, 19	54	61	87	58	28	7	5	4	1	..	..	..	305	622
19 ,, ,, ,, 20	51	62	82	67	28	9	8	4	..	..	..	..	311	660
20 ,, ,, ,, 21	66	50	96	66	36	17	6	2	2	..	..	..	341	735
21 ,, ,, ,, 25	215	223	296	182	111	35	14	6	..	1	1	1	1,085	2,136
25 ,, ,, ,, 30	382	235	157	68	26	2	3	4	..	..	..	..	877	913
30 ,, ,, ,, 35	311	81	38	5	5	..	..	..	..	..	..	..	440	192
35 ,, ,, ,, 40	149	21	2	3	1	..	..	..	..	..	..	..	176	38
40 ,, ,, ,, 45	81	2	1	..	..	..	..	..	..	..	..	..	84	4
45 ,, ,, over .	38	..	1	..	..	..	..	..	..	..	..	..	39	2
Total dissolutions of marriage . .	**3,727**	**2,623**	**2,390**	**1,219**	**510**	**163**	**63**	**26**	**7**	**1**	**1**	**1**	**10,731**	..
Total children(*a*) .	..	**2,623**	**4,780**	**3,657**	**2,040**	**815**	**378**	**182**	**56**	**9**	**10**	**11**	..	**14,561**

(*a*) The term 'children' refers to 'children of the marriage' as defined in the Matrimonial Causes *Act* 1959, living and under 21 years at the time of petition.

Ages of children of dissolved marriages

The following table shows the ages of children of marriages dissolved in 1968. The children referred to are those under twenty-one years of age at the time of petition.

CHILDREN OF DISSOLVED MARRIAGES(*a*), BY AGE AT TIME OF PETITION AUSTRALIA, 1968

etitioner	*Ages of children at time of petition*																		*Total number of children*
	Under 12 mths	*1 yr*	*2 yrs*	*3 yrs*	*4 yrs*	*5 yrs*	*6 yrs*	*7 yrs*	*8 yrs*	*9 yrs*	*10 yrs*	*11 yrs*	*12 yrs*	*13 yrs*	*14 yrs*	*15 yrs*	*16–20 yrs*	*Not stated*	
usband .	33	88	188	292	320	321	332	331	307	301	277	279	259	253	252	231	973	2	5,039
'ife . .	67	180	373	536	645	611	640	617	579	565	553	537	491	482	445	438	1,755	1	9,515
etitions of both .	..	1	1	..	..	1	..	1	..	1	..	..	..	..	1	..	1	..	7
Total .	**100**	**269**	**562**	**828**	**965**	**933**	**972**	**949**	**886**	**867**	**830**	**816**	**750**	**735**	**698**	**669**	**2,729**	**3**	**14,561**

(*a*) *See* footnote (*a*) to preceding table.

Number of divorced persons at each census, 1911 to 1966

The following table shows the number and proportion of divorced persons in Australia as recorded from returns supplied at each census from 1911 to 1966. A classification of divorced persons by ages for the censuses from 1891 to 1947 appeared in earlier issues of the Year Book (*see* No. 39, page 269). Prior to 1911 no record was made of divorced persons in South Australia, so comparisons cannot be made beyond that date.

DIVORCED PERSONS AT CENSUS DATES: AUSTRALIA, 1911 TO 1966

	Number							*Number per 10,000 of males or females 15 years of age and over*						
Sex	*1911*	*1921*	*1933*	*1947*	*1954*	*1961*	*1966*	*1911*	*1921*	*1933*	*1947*	*1954*	*1961*	*1966*
Males	2,368	4,233	10,298	25,052	32,389	38,640	42,885	15	23	42	89	100	105	105
Females	2,140	4,304	10,888	27,516	36,650	43,339	51,143	15	24	46	96	115	119	125

Bankruptcy

Particulars of bankruptcy in each State to the end of 1927 were incorporated in issues of the Year Book before No. 23. On 1 August 1928 the first Bankruptcy Act of the Commonwealth came into operation. This Act as amended was repealed by the *Bankruptcy Act* 1966–1968 which came into operation on 4 March 1968.

Under the *Bankruptcy Act* 1966–1968 the Commonwealth is divided into nine Bankruptcy Districts, of which three are in Queensland, and the remainder coincide with the boundaries of the States and of the Northern Territory of Australia. The State of New South Wales and the Australian Capital Territory together constitute one district.

The Federal Court of Bankruptcy is invested with jurisdiction throughout Australia, but exercises it only in the Bankruptcy Districts of the State of New South Wales and the Australian Capital Territory, and the State of Victoria. Certain State Courts have been invested with federal jurisdiction in bankruptcy and, outside New South Wales and Victoria, exercise that jurisdiction in the appropriate Bankruptcy District. The Supreme Court of the Northern Territory has also been invested with federal jurisdiction in bankruptcy, but certain restrictions are placed on its powers unless the debtor or bankrupt resides or carries on business in the Territory.

Any debtor unable to pay his debts may present to a Registrar in Bankruptcy a petition against himself accompanied by a statement of his affairs. Upon their acceptance by the Registrar the debtor becomes a bankrupt. A creditor may apply for a compulsory sequestration if the debtor has committed an act of bankruptcy. The act of bankruptcy usually relied on is that the debtor has failed to comply with the requirements of a bankruptcy notice issued in respect of a debt due under a judgment or order, or to satisfy the Court that he has a counter-claim, set-off, or cross demand equal to or exceeding the debt and which he could not have set up in the proceedings in which the judgment or order was obtained. The prescribed form of bankruptcy notice requires the debtor, within a specified time, to pay the amount of the debt due under the judgment or order, secure payment of the debt, or compound the debt. If an act of bankruptcy is committed, a creditor may thereupon present a petition against a debtor, provided that the debt or debts amount to not less than $500, the act of bankruptcy relied on has occurred within six months preceding the presentation of the petition, and the statutory requirements relating to presence or residence in Australia are applicable to the debtor.

When a debtor becomes bankrupt, either by acceptance of his own petition, or by the making of a sequestration order, the property of the bankrupt vests forthwith in The Official Receiver in Bankruptcy and after-acquired property of the bankrupt vests, as soon as it is acquired by the bankrupt, in the Official Receiver in Bankruptcy or, if a person other than an official receiver is trustee of the property of the bankrupt, in that trustee. The property of the bankrupt is divisible among his creditors in accordance with the provisions of the Act. No creditor may, in respect of a debt provable in bankruptcy, enforce any remedy against the person or property of the bankrupt, or, except with the leave of the Court, commence any legal proceeding or take any fresh step in such a proceeding.

Part X of the Act enables a debtor and his creditors to enter into arrangements without having a sequestration order made against him. These arrangements may take the form of a composition, a deed of assignment, or a deed of arrangement. A debtor who desires that his affairs be dealt with under this Part may authorise a solicitor or a registered trustee to call a meeting of his creditors.

The Court has power to decide questions of law affecting a bankrupt estate. Questions of fact may be tried before a jury.

The Act provides for an Inspector-General in Bankruptcy. It also provides for a Registrar in Bankruptcy to be appointed for each Bankruptcy District, and for so many Deputy Registrars in Bankruptcy as are necessary. Each Registrar and Deputy Registrar has such powers and functions as are conferred or imposed on a Registrar by the Act, and may exercise such of the powers and functions of an administrative nature exercisable by the Court as the Court directs or authorises him to exercise. He may examine a bankrupt, the spouse of a bankrupt, and a person indebted to a bankrupt or having in his possession any of the estate or effects of a bankrupt.

There is an official receiver for each District and the official receivers together constitute a body corporate known as 'The Official Receiver in Bankruptcy'. An official receiver is a permanent officer of the Commonwealth Public Service. His duties are to investigate the conduct, property and transactions of a bankrupt, and the cause of his bankruptcy, and to realise and administer the property of the bankrupt. In respect of these activities an official receiver is under the control of the Court.

A person registered by the Court as qualified to act as a trustee may be appointed by resolution of the creditors to be the trustee of the estate of a bankrupt. Until a trustee of the estate of a bankrupt is appointed by the creditors or the Court, or if a trustee is not so appointed, or there is, for any other reason, at any time no trustee so appointed, the official receiver for the District in which the sequestration order was made or the debtor's petition was presented is the trustee of the estate.

In cases where a vacancy occurs in the office of trustee under a deed of arrangement, a deed of assignment or a composition under Part X of the Act, a meeting of creditors or the Court may appoint a registered trustee to the vacant office. The Court may also appoint an official receiver or a registered trustee who is willing so to act as trustee until the vacant office is filled by a meeting of creditors.

Bankruptcy proceedings

The following table shows the number of bankruptcies of the various types in each State, together with the assets and liabilities of the debtors, during 1967–68.

BANKRUPTCY PROCEEDINGS: STATES AND TERRITORIES, 1967-68

State or Territory			*Sequestration orders and orders for administration of deceased debtors' estates*	*Compositions*	*Deeds of assignment*	*Deeds of arrangement*	*Total*
N.S.W.(*a*)	Number	.	550	10	8	34	602
	Liabilities	$	3,503,584	163,590	269,303	2,255,510	6,191,987
	Assets	$	1,765,653	187,132	106,655	1,199,406	3,258,846
Vic.	Number	.	520	13	13	33	579
	Liabilities	$	4,567,331	627,653	552,754	676,685	6,424,423
	Assets	$	1,318,185	253,984	378,640	540,645	2,491,454
Qld	Number	.	288	4	4	11	307
	Liabilities	$	2,541,910	135,771	207,948	238,283	3,123,912
	Assets	$	1,063,282	51,409	208,843	118,167	1,441,701
S. Aust.	Number	.	698	8	5	2	713
	Liabilities	$	3,360,073	93,230	126,358	29,686	3,609,347
	Assets	$	1,822,885	60,149	149,735	18,190	2,050,959
W. Aust.	Number	.	221	41	5	6	273
	Liabilities	$	947,182	767,030	72,787	101,011	1,888,010
	Assets	$	221,678	582,718	73,722	89,035	967,153
Tas.	Number	.	71	2	..	2	75
	Liabilities	$	299,254	40,648	..	29,111	369,013
	Assets	$	100,595	53,473	..	44,786	198,854
N.T.	Number	.	2	..	..	..	2
	Liabilities	$	2,181	..	..	..	2,181
	Assets	$	8	..	..	..	8
Australia	**Number**	.	**2,350**	**78**	**35**	**88**	**2,551**
	Liabilities	$	**15,221,515**	**1,827,922**	**1,229,150**	**3,330,286**	**21,608,873**
	Assets	$	**6,292,286**	**1,188,865**	**917,595**	**2,010,229**	**10,408,975**

(*a*) Includes the Australian Capital Territory.

The two tables which follow show Australian figures in respect of each of the various types of bankruptcy, and State figures in respect of all types of bankruptcy, for the years 1963–64 to 1967–68.

BANKRUPTCY PROCEEDINGS: AUSTRALIA, 1963-64 TO 1967-68

Year			*Sequestration orders and orders for administration of deceased debtors' estates*	*Compositions*	*Deeds of assignment*	*Deeds of arrangement*	*Total*
1963–64	Number		2,392	142	23	121	2,678
	Liabilities	$'000	15,608	1,753	688	2,593	20,642
	Assets	$'000	6,393	1,231	490	2,179	10,292
1964–65	Number . .		2,453	128	13	110	2,704
	Liabilities	$'000	15,740	1,993	312	1,804	19,850
	Assets	$'000	6,127	1,129	129	1,365	8,749
1965–66	Number . .		2,384	133	23	113	2,653
	Liabilities	$'000	15,106	4,082	634	3,176	22,998
	Assets	$'000	6,488	3,585	725	2,623	13,421
1966–67	Number . .		2,284	127	18	108	2,537
	Liabilities	$'000	19,108	2,176	535	2,310	24,129
	Assets	$'000	7,685	1,293	308	1,542	10,829
1967–68	Number . .		2,350	78	35	88	2,551
	Liabilities	$'000	15,222	1,828	1,229	3,330	21,609
	Assets	$'000	6,292	1,189	918	2,010	10,409

BANKRUPTCY PROCEEDINGS: STATES AND TERRITORIES, 1963-64 TO 1967-68

Year			*N.S.W. (a)*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*Aust.*
1963–64 .	Number . .		772	631	271	629	241	128	6	2,678
	Liabilities	$'000	7,774	5,993	1,800	3,291	1,142	545	97	20,642
	Assets	$'000	3,192	2,647	1,609	2,009	509	264	61	10,292
1964–65 .	Number . .		798	613	255	633	308	96	1	2,704
	Liabilities	$'000	5,937	6,343	2,041	3,507	1,610	405	6	19,850
	Assets	$'000	2,829	2,088	1,165	1,879	598	190	. .	8,749
1965–66 .	Number . .		818	594	262	592	277	106	4	2,653
	Liabilities	$'000	6,633	7,223	2,115	3,144	3,231	624	28	22,998
	Assets	$'000	3,713	4,125	1,175	1,709	2,470	222	8	13,421
1966–67 .	Number . .		670	559	262	694	277	70	5	2,537
	Liabilities	$'000	5,758	9,157	3,477	3,773	1,607	304	53	24,129
	Assets	$'000	2,636	3,885	1,483	1,760	813	175	78	10,829
1967–68 .	Number . .		602	579	307	713	273	75	2	2,551
	Liabilities	$'000	6,192	6,424	3,124	3,609	1,888	369	2	21,609
	Assets	$'000	3,259	2,491	1,442	2,051	967	199	. .	10,409

(*a*) Includes the Australian Capital Territory.

Police

The primary duties of the police are to prevent crime, to detect and detain offenders, to protect life and property, to enforce the law, and to maintain peace and good order. In addition, they perform many duties in the service of the State, e.g. they act as clerks of petty sessions in small centres, as crown land bailiffs, foresters, mining wardens, and inspectors under the fisheries and various other Acts. In metropolitan and large country areas they also regulate the street traffic. With the exception of the Commonwealth Police Force and the police in the Northern Territory and the Australian Capital Territory, the police forces of Australia are under the control of the State Governments, but their members perform certain functions for the Commonwealth Government, such as acting as aliens registration officers and policing various Commonwealth Acts and Regulations.

Women police perform special duties at places where young women and girls are subject to moral danger, control traffic at school crossings and lecture school children on road safety. They also assist male police as required in the performance of normal police duties.

The strength of the police force and the duties and ranks of the personnel involved in each State and Territory for 1968 are shown in the following table. Comparability between States is affected by differences in the classification of ranks and duties, and known differences between States are mentioned in footnotes.

Also included in the table are statistics of ancillary and civilian staff employed by police departments. Differences between States in the use of such staff are considerable. These differences arise, on the one hand, from differences in the extent to which police make use of such staff for police functions and, on the other hand, in the extent to which such staff are required to undertake additional functions (such as parking control) which are allocated to the police in varying degree between States. There is also some overlap between duties of ancillary and civilian staff as defined in footnotes (*i*), (*j*), (*k*) and (*m*) of the following table.

POLICE FORCES AND ASSISTANT STAFFS: STATES AND TERRITORIES, 30 JUNE 1968

Duty and rank(a)	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*
POLICE FORCES								
Criminal investigations, plain clothes police, scientific duties—								
Executive officers	3	2	..	1	..	1	..	..
Inspectors	16	12	12	3	5	5	..	1
Sergeants	411	53	153	35	54	16	8	6
Constables(*b*)	770	590	(*c*)298	206	113	68	16	21
Total, criminal investigations, etc.	1,200	657	463	245	172	90	24	28
Traffic duties—								
Executive officers	2	1	..	1	..	1	..	..
Inspectors	9	9	5	3	3	2	..	1
Sergeants	154	16	33	16	13	7	1	7
Constables(*b*)	839	436	(*c*)243	179	105	65	8	39
Total, traffic duties	1,004	462	281	199	121	75	9	47
Other special and general duties—								
Executive officers	26	22	..	5	..	1	..	..
Inspectors	115	91	(*d*)57	33	31	29	2	5
Sergeants	1,218	182	674	164	185	40	20	35
Constables(*b*)	3,207	3,080	(*c*)1,436	1,091	870	353	95	107
Total, other special, etc.	(*e*)4,566	3,375	2,167	1,293	(*f*)1,086	423	(*e*)117	(*e*)147
Not allocated—								
Executive officers whose duties extend beyond one branch	4	(*g*)3	(*h*)4	2	(*g*)3	5	(*g*)2	2
Inspectors	..	2	..	..	..	..	..	..
Police women	70	58	18	38	21	12	2	4
Trainees and cadets	197	268	150	437	18	34	18	..
Total, not allocated	271	331	172	477	42	51	22	6
Total police force—								
Executive officers	35	(*g*)28	(*h*)4	9	(*g*)3	8	(*g*)2	2
Inspectors	140	114	74	39	39	36	2	7
Sergeants	1,783	251	860	215	252	63	29	48
Constables(*b*)	4,886	4,106	(*c*)1,977	1,476	1,088	486	119	167
Police women	70	58	18	38	21	12	2	4
Trainees and cadets	197	268	150	437	18	34	18	..
Total police force	*7,111*	*4,825*	*3,083*	*2,214*	*1,421*	*639*	*172*	*228*
ANCILLARY AND CIVILIAN STAFFS								
Employed by Police Department—								
Ancillary staff(*i*)								
Full-time	186	109	25	(*j*)163	..	66	33	..
Part-time	..	4	..	2	54	..	..	..
Civilian staff(*k*)								
Full-time	(*l*)661	725	281	76	(*m*)299	81	16	29
Part-time	..	47	23	8	80	..	..	1

For footnotes *see* next page.

POLICE FORCES AND ASSISTANT STAFFS: STATES AND TERRITORIES, 30 JUNE 1968—*continued*

Duty and rank(a)	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*
TOTAL STAFFS								
Grand total—								
Full-time	7,958	5,659	3,389	2,453	1,720	786	221	257
Part-time	. .	51	23	10	134	. .	. .	1

(*a*) Where more than one duty is involved, officers have been allocated to the category of duties in which the greater part of their time is spent. The allocation of executive officers and inspectors to categories of duties is necessarily somewhat arbitrary and varies from State to State. (*b*) Includes probationary constables. (*c*) Excludes probationary constables; included with trainees and cadets. (*d*) Includes sub-inspectors. (*e*) Does not include transport and maintenance; each section undertakes its own transport, and maintenance is done on contract and/or by the government transport pool. (*f*) Includes officers engaged on motor vehicle examination and testing and licensing drivers. (*g*) Includes 1 chief inspector. (*h*) Includes 1 commissioner's inspector and 1 chief inspector. (*i*) Parking police, native trackers, wardresses, etc.; special constables in New South Wales and Tasmania; police reservists in Victoria. (*j*) Includes clerical workers in the Women Police Auxiliaries. (*k*) Clerks, typists, artisans, cleaners. (*l*) Does not include cleaning which isdone by the Cleaning Services Branch of the Government Stores Department. (*m*) Includes 41 cadets whose appointment is not subject to the W.A. Police Act.

POLICE FORCES: STATES AND TERRITORIES, 1964 TO 1968

30 June—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1964 . . .	5,950	4,448	2,818	1,830	1,266	598	149	135	17,194
1965 . . .	6,121	4,527	2,810	1,926	1,306	633	155	165	17,643
1966 . . .	6,486	4,656	2,975	1,994	1,349	619	157	186	18,422
1967 . . .	6,765	4,711	3,056	2,059	1,375	645	151	215	18,977
1968 . . .	7,111	4,825	3,083	2,214	1,421	639	172	228	19,693

Commonwealth Police Force

The Commonwealth Police Force commenced operations on 21 April 1960, and is the principal agency for the enforcement of the laws passed by the Commonwealth Parliament. It is also responsible for the protection of Commonwealth property and interests at various buildings and establishments under the control of the Commonwealth. This force co-ordinates the work of other Commonwealth investigation and law enforcement agencies and acts on behalf of the United Nations Organization for the suppressing of traffic in women and the suppression of obscene literature.

Under the control of the force is the Australian Police College at Manly, New South Wales, which provides training for officers of various police forces and other agencies in Australia and New Zealand. The force has its Head Office in Canberra and District Offices in each capital city. The strength of the force at 30 June 1968 was 800 policemen and 3 policewomen. At that date there were, in addition, 85 civilian employees.

Prisons

Prisons and prison accommodation

PRISONS AND PRISON ACCOMMODATION: STATES AND NORTHERN TERRITORY, 1967

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*Aust*
Prisons . . .	18	13	7	14	20	1	2	75
Accommodation . .	3,100	2,490	1,078	1,118	1,238	404	96	9,524

There is no gaol in the Australian Capital Territory, but there is a lock-up attached to the police station at Canberra and another lock-up at Jervis Bay where offenders are held for short periods. Prisoners remanded or sentenced by a court in the Australian Capital Territory for more than five days are usually held in New South Wales prisons.

Convicted prisoners

CONVICTED PRISONERS: STATES AND TERRITORIES, 1963 TO 1967

30 June—	N.S.W. (a)	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	Australia	
								Number	Per 10,000 of population
1963	3,043	1,942	890	749	774	231	66	7,695	7.0
1964	3,090	1,981	801	726	825	232	74	7,729	6.9
1965	2,957	1,879	949	796	803	210	129	7,723	6.8
1966	3,140	1,872	995	818	863	259	107	8,054	6.9
1967	3,334	1,994	1,021	866	1,137	275	112	8,739	7.4

(a) Includes Australian Capital Territory prisoners held in New South Wales prisons.

Patents, trade marks and designs

Patents

Patents for inventions are granted under the *Patents Act* 1952–1966, which applies to the Commonwealth of Australia and the Territories of Norfolk Island, Papua and New Guinea. The Act is administered by a Commissioner of Patents. The principal fees payable up to and including the grant of a patent amount to $39. Renewal fees are payable as follows: $10 before the expiration of the fourth year, and an amount progressively increasing by $2 before the expiration of each succeeding year up to the final fee of $32, payable before the expiration of the fifteenth year. An extension of time for six months for payment of a renewal fee may be obtained.

PATENTS: AUSTRALIA, 1964 TO 1968

	1964	1965	1966	1967	1968
Applications	14,134	15,150	16,007	15,733	16,712
Applications accompanied by provisional specifications	3,603	3,783	3,853	3,708	3,899
Letters patent sealed	5,456	7,277	6,140	6,356	5,537

Trade marks and designs

Under the *Trade Marks Act* 1955–1966 the Commissioner of Patents is also Registrar of Trade Marks. Provision is made for the registration of users of trade marks and for their assignment with or without the goodwill of the business concerned. A new classification of goods was adopted in 1958, and trade marks registered under repealed Acts are reclassified on renewal. Under the *Designs Act* 1906–1968 the Commissioner of Patents is also Registrar of Designs.

TRADE MARKS AND DESIGNS: AUSTRALIA, 1964 TO 1968

	1964	1965	1966	1967	1968
Trade marks—					
Received	6,280	6,583	6,714	7,537	8,301
Registered	3,606	3,256	3,272	5,333	4,612
Designs—					
Received	1,572	1,567	1,523	1,627	1,769
Registered	1,287	1,260	642	1,833	1,614

Copyright

Copyright is regulated by the Commonwealth *Copyright Act* 1912–1963 wherein, subject to modifications relating to procedure and remedies, the British Copyright Act of 1911 has been adopted and scheduled to the Australian law. The Act is administered by the Commissioner of Patents.

Reciprocal protection of unpublished works was extended in 1918 to citizens of Australia and of the United States of America, under which copyright may be secured in the latter country by registration at the Library of Congress, Washington. The Commonwealth Government promulgated a further Order-in-Council which came into operation on 1 February 1923 and extended the provisions of the Copyright Act to the foreign countries of the Copyright Union, subject to the observance of the conditions contained therein.

COPYRIGHT: AUSTRALIA, 1964 TO 1968

	1964	*1965*	*1966*	*1967*	*1968*
Applications lodged . .	1,360	1,438	1,291	1,387	1,584
Applications registered . .	1,275	1,277	1,113	1,231	1,405

Cost of administration of law and order

Expenditure by the States

The tables following show the net expenditure (i.e. gross expenditure less receipts from fees, fines, recoups for services rendered, etc.) from Consolidated Revenue in connection with the administration of justice, police and prisons. The figures exclude Loan Fund expenditure and expenditure on debt charges, pay-roll tax and superannuation payments. Because of differing legislative and administrative arrangements in the various States, the activities covered by the figures shown are not exactly the same in each State. Small differences also result from differing accounting practices. However, the figures shown for individual States are comparable from year to year.

STATE NET EXPENDITURE ON LAW AND ORDER, 1967-68

State	*Net expenditure*			*Per head of population*		
	Justice	*Police*	*Prisons(a)*	*Justice*	*Police*	*Prisons*
	$'000	$'000	$'000	$	$	$
New South Wales	5,786	28,040	5,321	1.33	6.45	1.22
Victoria.	(b) −950	22,159	2,944	(b)−0.29	6.71	0.89
Queensland	(b) −29	14,407	1,798	(b)−0.02	8.39	1.05
South Australia	(b)−1,942	8,531	1,467	(b)−1.74	7.63	1.31
Western Australia	73	6,218	1,811	0.08	6.96	2.03
Tasmania	613	2,931	731	1.62	7.73	1.93
Total	**3,552**	**82,286**	**14,072**	**0.30**	**7.00**	**1.20**

(a) Excludes expenditure on reformatories, which amounted to N.S.W., $2,401,547; Vic., n.a.; Qld, $162,062; S.A., $476,140; W.A., $717,173; Tas., $169,857. (b) Receipts for fines, legal fees and registrations exceed expenditure.

STATE NET EXPENDITURE ON LAW AND ORDER
AUSTRALIA, 1963-64 TO 1967-68
($'000)

Year	*Justice*	*Police*	*Prisons (a)*
1963–64 . . .	5,454	60,051	8,462
1964–65 . . .	5,408	64,338	10,633
1965–66 . . .	5,495	68,132	10,261
1966–67 . . .	4,133	77,197	11,824
1967–68 . . .	3,552	82,286	14,072

(a) Excludes expenditure on reformatories, which amounted to: 1963–64, $2,944,662; 1964–65, $1,970,083; 1965–66, $3,239,536; 1966–67, $3,672,797; 1967–68, $3,926,779. Expenditure on reformatories in Victoria is not included in these amounts.

Commonwealth expenditure

Since the functions of the Commonwealth Government in the administration of law and order differ considerably from those of the States, precise comparison between Commonwealth and State expenditure in this field is not possible. The following tables show expenditure by the Commonwealth Government on the services it performs in relation to law and order.

COMMONWEALTH EXPENDITURE ON LAW AND ORDER, 1967-68
($'000)

	Gross expenditure	*Receipts*	*Net expenditure*
Justice—			
Administration	1,664	581	1,082
Bankruptcy	952	104	849
Crown Solicitor's Office	1,662	..	1,662
High Court	293	..	293
Judges' salaries and pensions	252	..	252
Rent	710	..	710
Court reporting	609	242	367
Territory courts	652	394	258
Repairs and maintenance	223	..	223
Total, justice	*7,017*	*1,321*	*5,696*
Police—			
Commonwealth Police Force	3,661	..	3,661
Australian Police College	81	..	81
Australian Security and Intelligence Organization	2,753	..	2,753
Northern Territory Police	1,044	..	1,044
Australian Capital Territory Police	1,385	..	1,385
Total, police	*8,924*	..	*8,924*
Prisons—			
Northern Territory prisons	273	..	273
Total, prisons	*273*	..	*273*
Total, law and order	**16,215**	**1,321**	**14,893**

COMMONWEALTH EXPENDITURE ON LAW AND ORDER 1963-64 TO 1967-68
($'000)

Year	*Gross expenditure*	*Receipts*	*Net expenditure*
1963–64	8,280	1,220	7,061
1964–65	9,342	1,236	8,106
1965–66	10,363	1,529	8,834
1966–67	14,123	1,624	12,499
1967–68	16,215	1,321	14,893

CHAPTER 17

NATIONAL ACCOUNTS

NATIONAL INCOME AND EXPENDITURE

National accounting aims at providing a systematic summary of the transactions taking place in the economy, especially of those that relate to the production and use of goods and services, and to transfers of income or capital between sectors of the economy.

Estimates of national income and expenditure have been compiled by the Bureau since 1944–45 and have been published annually as papers entitled *National Income and Expenditure* accompanying the Commonwealth Budgets. Detailed annual estimates of national income and expenditure on a revised basis were published in *Australian National Accounts, National Income and Expenditure*, 1967–68. Preliminary estimates (less detailed) for 1967–68 were published earlier in a Budget Paper. Quarterly estimates are published in *Quarterly Estimates of National Income and Expenditure*.

The figures shown on pages 599–606 are as published in *Australian National Accounts, National Income and Expenditure*, 1967–68.

Description of the National Accounts

A brief description of the conceptual basis of national accounts is given in this section, but for a more detailed treatment of the concepts and structure of the Australian National Accounts reference should be made to *Australian National Accounts, National Income and Expenditure*, 1967–68, or to Year Book No. 50, pages 1253–68.

Definition and relationship of the concepts of product, income and expenditure

The main concepts of product, income and expenditure in the Australian National Accounts are defined and expressed in equivalents as follows.

Gross national expenditure is the total expenditure within a given period on final goods and services (i.e. excluding goods and services used up in the process of production) bought for use in the Australian economy. It is equivalent to gross national product plus imports of goods and services less exports of goods and services.

National turnover of goods and services is the total flow within a given period of final goods and services (i.e. excluding any goods and services used up during the period in the process of production) entering the Australian economy from production and imports. This value is equivalent to gross national product plus imports of goods and services or, alternatively, to gross national expenditure plus exports of goods and services.

Gross national product is the total market value of goods and services produced in Australia within a given period after deduction of the cost of goods and services used up in the process of production but before deducting allowances for the consumption of capital equipment. Thus gross national product, as here defined is 'at market prices'. It is equivalent to gross national expenditure plus exports of goods and services less imports of goods and services.

Gross national product at factor cost is that part of the cost of producing the gross national product which consists of gross payments to factors of production (labour, land, capital, and enterprise). It represents the value added by these factors in the process of production and is equivalent to gross national product less indirect taxes plus subsidies. *Gross farm product at factor cost* is that part of gross national product at factor cost arising from production in rural industries (excluding forestry). *Gross non-farm product at factor cost* arises from production in all other industries.

Net national product is the part of the value added within a given period by factors of production (labour, land, capital, and enterprise) which accrues as income to their suppliers after allowing for the depreciation of capital equipment. It is equivalent to gross national product at factor cost less depreciation allowances.

National income is the net income accruing within a given period to Australian residents from their services in supplying factors of production (labour, land, capital, and enterprise) in Australia or overseas. It is equivalent to net national product plus income receivable from overseas less income payable overseas.

Personal income is the total income, whether in cash or kind, received by persons normally resident in Australia. It includes both income received in return for productive activity (such as wages, salaries and supplements, incomes of unincorporated enterprises, etc.) and transfer incomes (such as cash, social service benefits, interest, etc.). Personal income also includes any property income received by non-taxable organisations such as private schools, churches, charitable organisations, etc. However, it excludes any income which might be said to accrue to persons in the form of undistributed company income and retained investment income of life insurance, etc., funds.

Framework of accounts and sectors

In the accounts shown in Tables 1 to 7 four internal sectors are distinguished—trading enterprises, financial enterprises, persons and public authorities. In addition, there is an overseas sector which shows a summary of the transactions into which overseas governments, persons and businesses enter with Australian residents. All the sectors (except the overseas sector) engage in productive activity, but in the tables a national production account for the whole economy is shown instead of separate accounts for each sector. Similarly, the tables show only a national capital account for the economy, but a current (or income appropriation) account is shown for each sector. The system of accounts as thus envisaged is a completely articulated system in that a credit in any account must be matched with a corresponding debit in some other account—or in the same account if a complete consolidation of the transactions appropriate to that account has not been carried through.

The framework of sectors and accounts underlying the form of social accounts shown in this Year Book is set out in the following diagram. As stated in the previous paragraph, each sector could be envisaged as having separate production, appropriation and capital accounts, but in the tables compiled for Australia the production and capital accounts have been combined. In the diagram the solid rectangles depict the actual form of the tables, and the remaining rectangles show the full amount of detail which would be needed to provide a complete articulation of the accounts. The appropriate number of each table on pages 599–603 is shown on the left of the diagram.

ARTICULATION OF AUSTRALIAN NATIONAL ACCOUNTS

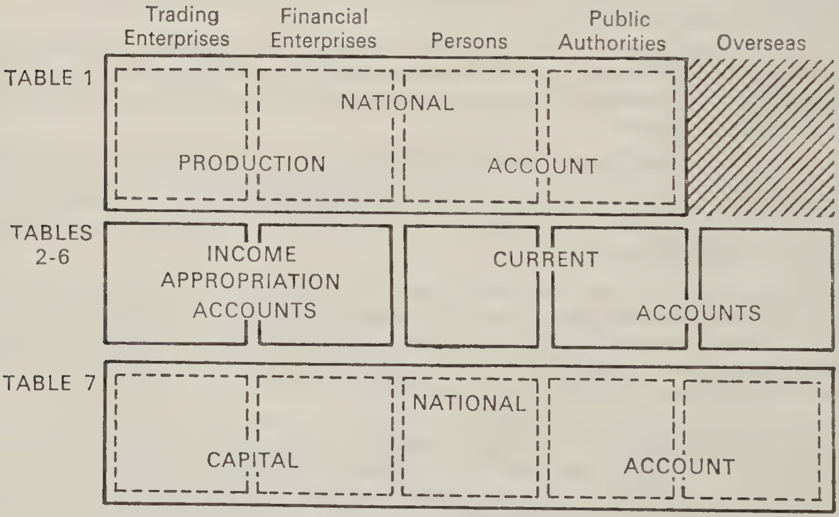


PLATE 35

Description of the accounts

The *national production account* is a consolidation of the production accounts of each sector. The production account is shown as receiving revenue from the sale of goods and services to final buyers; all intermediate goods and services are cancelled out, since they represent a cost to one producer to offset the revenue of the other. On the payments side are shown the payments of indirect taxes, and, since the account is presented from the point of view of the producing unit, the wages and salaries paid to employees. The balance is the gross operating surplus which is carried to the trading enterprises income appropriation account.

The *trading enterprises income appropriation account* is shown as receiving the gross operating surpluses from the national production account and property incomes (dividends, non-dwelling rent and interest) from other sectors. This total of receipts is appropriated to depreciation allowances and to various transfer payments (interest, etc., paid, income tax payable, dividends payable and undistributed income). All net income of unincorporated enterprises is treated as being transferred to persons and the same is true of personal income from dwelling rent. Any income of trading companies not distributed but retained for use in the business is shown as undistributed income and transferred to the national capital account either directly or by way of the overseas current account (where accruing to non-residents).

The *financial enterprises income appropriation account* is, in the main, similar to the preceding account. However, there is no operating surplus, as property income (which is treated as transfer income, not as income of factors of production) is the sole receipt.

The *personal current account* records all receipts on current account whether of factor incomes (wages and salaries) or transfer incomes (interest, etc., dividends, net business incomes, cash benefits from public authorities, and remittances from overseas). On the payments side are shown current payments for goods and services and transfer payments (taxes, interest, etc., remittances to overseas). The balance is transferred to the national capital account under the heading of personal saving.

The *public authorities current account* reflects a distinction between current and capital expenditure, which is necessarily arbitrary in some measure and has been made on the basis of excluding from the current account expenditure on public works and increase in stocks. Expenditure on public works is taken to include new buildings, construction, plant and machinery, and any replacement of assets charged to loan funds or capital works votes. Current account excludes capital expenditure of public enterprises (including replacement of assets charged to depreciation reserves but not those, if any, charged directly to working expenses) and all expenditure on roads, because a satisfactory distinction between new works and maintenance cannot be made. All defence expenditure is included in the current account.

The income of public enterprises shown in this account is derived by deducting from their operating surplus any depreciation shown by these enterprises in their published accounts, except in the case of enterprises whose accounts are included in the Commonwealth or State budgets and are at present analysed on the basis of cash accounts in which depreciation is not allowed. These depreciation allowances are included in the capital account. As in the case of persons, all overseas gifts are included in the current account. These include gifts for international relief, technical assistance, etc., grants, contributions to international organisations and expenditure in connection with the administration of Papua and New Guinea.

The *overseas current account* records all transactions of a current nature between Australian and overseas residents. It should be emphasised that this account is shown here from the point of view of overseas residents, i.e. receipts from Australia are shown as credits, and payments to Australia as debits. Australians temporarily overseas are regarded as residents, and visitors to Australia as non-residents.

Capital transactions of the four domestic sectors and the net deficit on current account with overseas are shown in the *national capital account*. On the receipts side are shown the savings of the various sectors—saving by enterprises, personal saving, the retained investment income of insurance funds, and the public authority surplus on current account. Net apparent capital inflow from overseas and withdrawal from monetary reserves are reflected in the item 'overseas balance on current account'. On the payments side are shown the purchases by all sectors of new buildings and capital equipment and the increase in the value of stocks. The private component of capital expenditure includes new dwellings, additions and major alterations to dwellings and expenditure of a capital nature by private non-profit institutions (churches, schools, clubs, etc.) but excludes motor vehicles for personal use and other durable consumer goods, which are included in personal consumption expenditure.

Estimates at constant prices

For certain types of economic analysis it is useful to examine estimates of the principal flows of goods and services in the economy revalued in such a way as to remove the direct effects of changes in their prices which have occurred over the period under review. Such estimates, conventionally described as 'at constant prices', are presented in Table 8 for gross national product, gross national expenditure, and the principal components of the latter.

Constant price estimates amount to an attempt to express every component item of expenditure as the product of a price and a quantity, instead of only as a value, and to substitute for the actual current prices the prices that ruled in the chosen base year. Such estimates can be made only on the basis of approximations and assumptions, and this should be borne in mind in the interpretation and use of the results.

Gross national product is equivalent to gross national expenditure, plus exports of goods and services, less imports of goods and services. This relationship has been used in deriving the estimates of gross national product at constant prices shown in Table 8.

For a considerable part of personal consumption expenditure, exports, and imports, it is possible to identify specific units of quantity and price and to revalue the quantities at base year prices. Where it is not possible to express the values in successive years as the product of prices and homogeneous units of quantity, the treatment generally adopted is to divide values by appropriate price indexes.

For gross fixed capital expenditure, some components are revalued by means of appropriate price or volume indexes; but where homogeneous or standard units of quantity do not exist, the values are divided by indexes of prices of labour and materials. This latter method of revaluation is also applied to current expenditure by financial enterprises and public authorities. The resulting estimates have considerable limitations for many uses, for example in studies of productivity.

The information available on which to base an estimate of changes in stocks at constant prices is very limited, and hence any estimate made is subject to an appreciable margin of error. The method used involves an adjustment for stock revaluation, arising out of the replacement during the year of opening stocks with equivalent new stocks at different prices, or because of the practice of revaluing stocks at the end of the period.

Part I of *Australian National Accounts, National Income and Expenditure*, 1967–68 contains a fuller discussion of the conceptual problems involved in making these estimates, and Appendix B of that publication contains a brief account of the sources and methods used in preparing the estimates.

Reliability and future revisions

Estimates of national income and expenditure are necessarily prepared from a very wide range of statistical information, some of which is available quickly, some of it only with a delay of several years after the period to which it relates. Some of it is closely related to the desired national income concepts, but some of it is not completely satisfactory in various respects, including coverage, concepts and timing. Estimates, in particular for the most recent years, are therefore subject to revison.

This applies particularly to estimates based on income tax statistics—income of companies, non-farm unincorporated enterprises, depreciation, and part of gross private fixed investment—which are subject to substantial revisions for the last two years, as tabulations of income tax statistics do not become available until about twenty-two months after the end of each financial year.

It is not possible to put precise limits on the degree of revision likely in any particular series, nor to state degrees of reliability in a statistical sense. These depend in large part on the range and quality of the basic statistical data. For illustrations of common causes of revisions reference should be made to *Australian National Accounts, National Income and Expenditure*, 1967–68.

National accounts and tables

Items in tables 1 to 7 are consecutively numbered from 1 to 28, with or without the addition of a letter, and this system is used to identify the corresponding credit and debit entries in the accounts and as a key to the notes on pages 607–10. In some cases the items correspond exactly, while in other cases an entry in one table is the sum of two or more entries in other tables; here the total is given a number, and the components have a number and a letter. In the remaining type of case all entries are given the same number and a distinguishing letter, because in this group one item is not the sum of one or more entries. The relationship between these items can still be traced through because the sum of all credit entries must equal the sum of all debit entries.

TABLE 1
NATIONAL PRODUCTION ACCOUNT
($ million)

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
1	Wages, salaries, and supplements	8,798	9,818	10,584	11,512	12,494
	Gross operating surplus of trading enterprises—					
2*a*	Companies	2,543	2,914	2,966	3,235	3,578
2*b*	Unincorporated enterprises	3,436	3,523	3,395	3,855	3,530
2*c*	Dwellings owned by persons	817	890	957	1,039	1,134
2*d*	Public enterprises	575	638	684	715	800
	Gross national product at factor cost	16,169	17,783	18,586	20,356	21,536
3	Indirect taxes less subsidies	1,832	2,062	2,236	2,381	2,616
	Gross national product	18,001	19,845	20,822	22,737	24,152
4	Imports of goods and services	2,866	3,480	3,629	3,701	4,131
	National turnover of goods and services	*20,867*	*23,325*	*24,451*	*26,438*	*28,283*
	Net current expenditure on goods and services—					
5	Personal consumption	11,084	11,964	12,651	13,576	14,685
6	Financial enterprises	236	258	281	308	335
7	Public authorities	1,778	2,040	2,383	2,690	3,032
	Gross fixed capital expenditure—					
8	Private	2,898	3,369	3,639	3,725	4,046
9	Public enterprises	863	1,009	1,122	1,191	1,328
10	Public authorities	745	838	920	974	1,030
11	Increase in value of stocks	176	684	238	512	308
12	Statistical discrepancy	−75	115	80	−7	−31
	Gross national expenditure	17,705	20,277	21,314	22,969	24,733
13	Exports of goods and services	3,162	3,048	3,137	3,469	3,550
	National turnover of goods and services	*20,867*	*23,325*	*24,451*	*26,438*	*28,283*
	Gross national product at factor cost	16,169	17,783	18,586	20,356	21,536
	of which—					
	Farm	2,153	2,070	1,839	2,212	1,747
	Non-farm	14,016	15,713	16,747	18,144	19,789

TABLE 2

TRADING ENTERPRISES INCOME APPROPRIATION ACCOUNT

($ million)

		1963–64	1964–65	1965–66	1966–67	1967–68
2	Gross operating surplus	7,371	7,965	8,002	8,844	9,042
15*b*, 17*b*	Interest, etc., and dividends received	125	133	138	149	160
18*b*	Undistributed income accruing from overseas	14	19	18	13	17
	Total receipts	*7,510*	*8,117*	*8,158*	*9,006*	*9,219*
14*a*	Depreciation allowances	1,481	1,635	1,780	1,933	2,091
15*a*	Interest, etc., paid	731	839	960	1,078	1,205
	Company income—					
16*a*	Income tax payable	687	758	746	806	
17*a*	Dividends payable	505	510	515	638	
18*a*	Undistributed income	597	772	679	641	
	Total company income	1,789	2,040	1,940	2,085	2,312
19	Unincorporated enterprises income	2,676	2,702	2,533	2,917	2,520
20	Personal income from dwelling rent	460	496	522	556	602
21*a*	Public enterprises income	373	405	423	437	489
	Total outlay	*7,510*	*8,117*	*8,158*	*9,006*	*9,219*

TABLE 3

FINANCIAL ENTERPRISES INCOME APPROPRIATION ACCOUNT

($ million)

		1963–64	1964–65	1965–66	1966–67	1967–68
15*d*	Interest, etc., received	1,006	1,131	1,244	1,385	1,515
17*d*, 18*d*	Dividends received and undistributed income accruing from overseas	27	31	35	40	44
	Total receipts	*1,033*	*1,162*	*1,279*	*1,425*	*1,559*
14*b*	Depreciation allowances	15	18	23	27	30
6	Net current expenditure on goods and services	236	258	281	308	335
15*c*	Interest paid	322	382	429	469	497
	Company income—					
16*b*	Income tax payable	48	50	51	60	
17*c*	Dividends payable	42	42	43	47	
18*c*	Undistributed income	24	27	26	36	
	Total company income	114	119	120	143	157
21*b*	Public enterprises income	104	120	124	135	161
22	Retained investment income of life insurance funds, etc.	242	265	302	343	379
	Total outlay	*1,033*	*1,162*	*1,279*	*1,425*	*1,559*

TABLE 4

PERSONAL CURRENT ACCOUNT

($ million)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
1 Wages, salaries and supplements	8,798	9,818	10,584	11,512	12,494
15*f* Interest, etc., received	435	498	564	593	666
17*e* Dividends	379	372	351	442	459
19*a* Unincorporated enterprises income—Farm	1,373	1,272	1,044	1,342	827
19*b* Other	1,303	1,430	1,489	1,575	1,693
20 Income from dwelling rent	460	496	522	556	602
23*b* Remittances from overseas	104	115	121	134	154
25 Cash benefits from public authorities	1,046	1,098	1,179	1,271	1,324
Total receipts	*13,898*	*15,099*	*15,854*	*17,425*	*18,219*
5 Personal consumption expenditure	11,084	11,964	12,651	13,576	14,685
15*e* Interest paid	166	176	180	182	195
16*c* Income tax payable	1,272	1,496	1,655	1,885	2,038
16*d* Estate and gift duties	137	140	137	155	182
23*a* Remittances overseas	62	66	74	79	84
24 Saving	1,177	1,257	1,157	1,548	1,035
Total outlay	*13,898*	*15,099*	*15,854*	*17,425*	*18,219*

TABLE 5

PUBLIC AUTHORITIES CURRENT ACCOUNT

($ million)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
3*a* Indirect taxes	1,942	2,158	2,375	2,540	2,783
16*e* Income tax, estate and gift duties received	2,009	2,431	2,681	2,881	3,213
15*h* Interest, etc., received	81	104	113	115	100
21 Public enterprises income	477	525	547	572	650
Total receipts	*4,509*	*5,218*	*5,716*	*6,108*	*6,746*
7 Net current expenditure on goods and services	1,778	2,040	2,383	2,690	3,032
3*d* Subsidies	110	96	139	159	167
15*g* Interest, etc., paid	470	505	542	571	629
23*c* Overseas grants and contributions	87	107	127	151	158
25 Cash benefits to persons	1,046	1,098	1,179	1,271	1,324
26*a* Grants towards private capital expenditure	11	30	56	55	49
26*b* Devaluation compensation	. .	. .	. .	. .	21
27 Surplus on current account	1,007	1,342	1,290	1,211	1,366
Total outlay	*4,509*	*5,218*	*5,716*	*6,108*	*6,746*

TABLE 6
OVERSEAS CURRENT ACCOUNT
($ million)

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
4*a*	Imports f.o.b.	2,237	2,739	2,822	2,837	3,161
4*b*	Transportation	417	488	520	548	632
4*c*	Travel	102	114	122	133	140
4*d*	Government transactions	44	53	68	85	101
4*e*	Other goods and services	66	86	97	98	97
4	Total imports of goods and services	2,866	3,480	3,629	3,701	4,131
15*j*, 17*g*	Interest, etc., paid and dividends payable and profits remitted overseas	261	286	313	353	402
18*f*	Undistributed income accruing to overseas residents	132	119	117	98	115
23*a*	Personal remittances overseas	62	66	74	79	84
23*c*	Public authority grants and contributions	87	107	127	151	158
	Total credits to non-residents	*3,408*	*4,058*	*4,260*	*4,382*	*4,890*
13*a*	Exports f.o.b.	2,730	2,574	2,626	2,926	2,942
13*b*	Transportation	254	279	295	312	359
13*c*	Travel	43	54	58	70	87
13*d*	Government transactions	63	59	77	82	71
13*e*	Other goods and services	72	82	81	79	91
13	Total exports of goods and services	3,162	3,048	3,137	3,469	3,550
15*i*, 17*f*	Interest, etc., received and dividends receivable from overseas	80	100	96	109	111
18*e*	Undistributed income accruing from overseas	14	19	18	13	17
23*b*	Personal remittances from overseas	104	115	121	134	154
28	Overseas balance on current account	48	776	888	657	1,058
	Total debits to non-residents	*3,408*	*4,058*	*4,260*	*4,382*	*4,890*

TABLE 7

NATIONAL CAPITAL ACCOUNT

($ million)

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
14	Depreciation allowances	1,496	1,653	1,803	1,960	2,121
16*f*, 17*h*	Increase in dividend and income tax provisions	137	12	−85	42	24
18*g*	Undistributed company income accruing to residents	489	680	588	579	628
22	Retained investment income of life insurance funds, etc.	242	265	302	343	379
24	Personal saving	1,177	1,257	1,157	1,548	1,035
26*a*	Public authority grants towards private capital expenditure	11	30	56	55	49
26*b*	Devaluation compensation	. .	. .	. .	. .	21
27	Public authorities surplus on current account	1,007	1,342	1,290	1,211	1,366
	Overseas balance on current account—					
28*a*	Withdrawal from overseas monetary reserves(*a*)	−447	296	−61	120	−78
28*b*	Net apparent capital inflow	495	480	949	537	1,136
	Total capital funds accruing . .	*4,607*	*6,015*	*5,999*	*6,395*	*6,681*
	Gross fixed capital expenditure—					
8*a*	Private—Dwellings	754	891	888	968	1,085
8*b*	Other building and construction .	577	631	757	735	879
8*c*	All other	1,567	1,847	1,994	2,022	2,082
9	Public enterprises	863	1,009	1,122	1,191	1,328
10	Public authorities	745	838	920	974	1,030
	Total gross fixed capital expenditure .	4,506	5,216	5,681	5,890	6,404
11*a*	Increase in value of stocks—Farm . .	−26	107	−82	232	−195
11*b*	Other . .	202	577	320	280	503
	Total use of funds	4,682	5,900	5,919	6,402	6,712
12	Statistical discrepancy	−75	115	80	−7	−31
	Total capital funds accruing . .	*4,607*	*6,015*	*5,999*	*6,395*	*6,681*

(*a*) Minus sign (−) indicates an addition to reserves.

TABLE 8

VALUE OF MAIN AGGREGATES AT CURRENT AND AVERAGE 1959–60 PRICES

($ million)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
AT CURRENT PRICES					
Personal consumption expenditure	11,084	11,964	12,651	13,576	14,685
Current expenditure by financial enterprises and public authorities	2,014	2,298	2,664	2,998	3,367
Gross fixed capital expenditure—					
Public	1,608	1,847	2,042	2,165	2,358
Private—Dwellings	754	891	888	968	1,085
Other	2,144	2,478	2,751	2,757	2,961
Increase in value of stocks	176	684	238	512	308
Statistical discrepancy	−75	115	80	−7	−31
Total gross national expenditure	17,705	20,277	21,314	22,969	24,733
Gross national expenditure after stock valuation adjustment	17,569	20,114	21,107	22,692	24,551
Plus Exports of goods and services	3,162	3,048	3,137	3,469	3,550
Less Imports of goods and services	2,866	3,480	3,629	3,701	4,131
Gross national product after stock valuation adjustment	17,865	19,682	20,615	22,460	23,970
AT AVERAGE 1959–60 PRICES(*a*)					
Personal consumption expenditure	10,341	10,833	11,064	11,549	12,110
Current expenditure by financial enterprises and public authorities	1,765	1,921	2,166	2,289	2,455
Gross fixed capital expenditure—					
Public	1,427	1,588	1,705	1,739	1,840
Private—Dwellings	712	818	790	837	916
Other	2,062	2,317	2,505	2,448	2,574
Statistical discrepancy	−69	103	69	−6	−25
Gross national expenditure after stock valuation adjustment	16,272	18,066	18,319	19,070	19,955
Plus Exports of goods and services	2,931	2,929	2,968	3,339	3,550
Less Imports of goods and services	2,971	3,505	3,640	3,687	4,122
Gross national product after stock valuation adjustment	16,232	17,490	17,647	18,722	19,383

(*a*) *See* page 598.

Table 9

RELATIONSHIP OF MAIN AGGREGATES

($ million)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Net current expenditure on goods and services	13,098	14,262	15,315	16,574	18,052
Gross fixed capital expenditure	4,506	5,216	5,681	5,890	6,404
Increase in value of stocks	176	684	238	512	308
Statistical discrepancy	−75	115	80	−7	−31
Gross national expenditure	**17,705**	20,277	21,314	22,969	24,733
Plus Exports of goods and services	3,162	3,048	3,137	3,469	3,550
National turnover of goods and services	**20,867**	**23,325**	**24,451**	**26,438**	**28,283**
Less Imports of goods and services	2,866	3,480	3,629	3,701	4,131
Gross national product	**18,001**	**19,845**	**20,822**	**22,737**	**24,152**
Less Indirect taxes *less* subsidies	1,832	2,062	2,236	2,381	2,616
Gross national product at factor cost	**16,169**	**17,783**	**18,586**	**20,356**	**21,536**
Less Depreciation allowances of trading enterprises	1,481	1,635	1,780	1,933	2,091
Net national product	**14,688**	**16,148**	**16,806**	**18,423**	**19,445**
Less Net income payable overseas	299	286	316	329	389
National income	**14,389**	**15,862**	**16,490**	**18,094**	**19,056**
Plus Net income payable overseas	299	286	316	329	389
Net national product	**14,688**	**16,148**	**16,806**	**18,423**	**19.445**
Less Net operating surplus of companies and public enterprises	2,327	2,655	2,634	2,845	3,165
Less Interest, etc. paid by unincorporated enterprises and dwellings owned by persons	427	477	533	593	664
Plus Interest received by persons	435	498	564	593	666
Dividends received by persons	379	372	351	442	459
Cash benefits to persons	1.046	1,098	1,179	1,271	1,324
Remittances from overseas	104	115	121	134	154
Personal income	**13,898**	**15,099**	**15,854**	**17,425**	**18,219**
Less Income tax payable and estate and gift duties	1,409	1,636	1,792	2,040	2,220
Personal disposable income	**12,489**	**13,463**	**14,062**	**15,385**	**15,999**

TABLE 10

MAIN AGGREGATES AT CURRENT PRICES, 1948-49 TO 1967-68

($ million)

Year	1 *Personal Consumption*	2 *Net current expenditure on goods and services by public authorities and financial enterprises*	3 *Private gross fixed capital expenditure*	4 *Public gross fixed capital expenditure*	5 *Increase in value of stocks*	6 *Statistical discrepancy*	7 (1 to 6) *Gross national expenditure*
1948–49 . .	2,994	393	498	290	148	−11	4,312
1949–50 . .	3,446	468	644	410	315	37	5,320
1950–51 . .	4,186	635	920	589	531	−34	6,827
1951–52 . .	4,988	869	1,130	809	775	86	8,657
1952–53 . .	5,295	999	1,140	787	−181	−211	7,829
1953–54 . .	5,811	955	1,315	822	42	−90	8,855
1954–55 . .	6,319	1,028	1,477	875	278	65	10,042
1955–56 . .	6,786	1,152	1,625	932	345	−27	10,813
1956–57 . .	7,253	1,205	1,698	971	49	−140	11,036
1957–58 . .	7,610	1,247	1,842	1,015	2	−10	11,706
1958–59 . .	8,011	1,363	1,906	1,117	332	−113	12,616
1959–60 . .	8,782	1,490	2,175	1,219	237	118	14,021
1960–61 . .	9,305	1,597	2,397	1,260	524	32	15,115
1961–62 . .	9,593	1,729	2,311	1,402	−205	−96	14,734
1962–63 . .	10,285	1,836	2,558	1,452	317	−82	16,366
1963–64 . .	11,084	2,014	2,898	1,608	176	−75	17,705
1964–65 . .	11,964	2,298	3,369	1,847	684	115	20,277
1965–66 . .	12,651	2,664	3,639	2,042	238	80	21,314
1966–67 . .	13,576	2,998	3,725	2,165	512	−7	22,969
1967–68 . .	14,685	3,367	4,046	2,358	308	−31	24,733

Year	8 *Exports of goods and services*	9 *Imports of goods and services*	10 (7+8−9) *Gross national product*	11 *National income*	12 *Personal income*	13 *Wages, salaries and supplements*	14 *Net income payable overseas*
1948–49 . .	1,146	979	4,479	3,742	3,743	2,170	81
1949–50 . .	1,307	1,260	5,367	4,417	4,423	2,468	102
1950–51 . .	2,092	1,726	7,193	6,071	6,052	3,105	120
1951–52 . .	1,486	2,437	7,706	6,416	6,322	3,924	126
1952–53 . .	1,855	1,312	8,372	7,045	6,999	4,242	119
1953–54 . .	1,793	1,601	9,047	7,486	7,274	4,516	159
1954–55 . .	1,707	1,983	9,766	8,022	7,797	4,940	164
1955–56 . .	1,740	1,953	10,600	8,652	8,474	5,413	189
1956–57 . .	2,190	1,736	11,490	9,328	9,055	5,725	189
1957–58 . .	1,847	1,925	11,628	9,193	8,993	5,934	187
1958–59 . .	1,868	1,960	12,524	9,896	9,683	6,215	254
1959–60 . .	2,150	2,285	13,886	10,992	10,626	6,895	284
1960–61 . .	2,175	2,604	14,686	11,622	11,396	7,428	265
1961–62 . .	2,469	2,204	14,999	11,959	11,765	7,647	217
1962–63 . .	2,492	2,616	16,242	12,925	12,557	8,070	281
1963–64 . .	3,162	2,866	18,001	14,389	13,898	8,798	299
1964–65 . .	3,048	3,480	19,845	15,862	15,099	9,818	286
1965–66 . .	3,137	3,629	20,822	16,490	15,854	10,584	316
1966–67 . .	3,469	3,701	22,737	18,094	17,425	11,512	329
1967–68 . .	3,550	4,131	24,152	19,056	18,219	12,494	389

Description of items in the National Accounts

Tables 1 to 7

Item 1. *Wages, salaries and supplements.* Payments in the nature of wages and salaries as defined for pay-roll tax, including allowances for income in kind (board and quarters, etc.), together with supplements to wages, and pay and allowances of members of the forces. In addition to wages and salaries paid by employers subject to pay-roll tax, this item includes wages and salaries paid by employers not subject to pay-roll tax, based on estimates of employment and average earnings. Supplements consist of employers' contributions to pension and superannuation funds, direct payments of pensions and retiring allowances, and amounts paid as workers' compensation for injuries. Pay and allowances of members of the forces consist of active pay, field, subsistence and dependants' allowances, and the value to the members of the forces of food, clothing, normal medical attention, etc. supplied in kind. They include deferred pay, but exclude war gratuities which are included in item 25.

Item 2. *Gross operating surplus of trading enterprises.* The operating surplus, before deduction of depreciation provisions, dividends, interest, rent and royalties, and direct taxes payable, of all trading enterprises operating in Australia. Trading enterprises include all companies, public enterprises, partnerships and self-employed persons engaged in the production of goods and services for sale, but exclude financial enterprises. Public trading enterprises are government undertakings which attempt to recover all, or a substantial part, of their costs through charges made to the public for the sale of goods and services. All owners of dwellings are included whether they let the dwellings or occupy them themselves. Trading enterprises' gross operating surplus is shown separately for companies (item 2*a*), unincorporated enterprises (item 2*b*), dwellings owned by persons (item 2*c*), and public enterprises (item 2*d*).

Item 3. *Indirect taxes less subsidies.* Indirect taxes comprise taxes on purchases, sales or other transactions, or on the ownership of property, etc. paid by enterprises, public authorities and persons. They include licence fees in respect of rights conferred, such as liquor licences, etc. Subsidies are transfer payments made by public authorities, credited to the production accounts of enterprises, with the object of providing incentives to, or of assisting, certain industries or activities. Such payments may take the form of bounties on goods produced, subsidies to producers to ensure a guaranteed price, payments to transport undertakings to permit a reduction of freights on certain classes of goods, assistance to producers, etc.

Item 4. *Imports of goods and services.* The value of goods imported from overseas and amounts payable overseas for services. In Table 6 this item is sub-divided into the following components.

Item 4*a* *Imports f.o.b.* Recorded trade figures adjusted for the purpose of balance of payments estimates. The principal adjustments are the addition of unrecorded imports, including ships and aircraft for use on overseas routes, the subtraction of films imported on a rental basis, imports of gold, passengers' personal effects, goods for repair and goods intended for re-export, and the deduction of a 'valuation adjustment' representing the excess of the recorded value of imports (based on value for duty) over the estimated selling price to the importer as shown on invoices accompanying customs entries.

Item 4*b*. *Transportation.* Freight payable to foreign carriers on goods imported into Australia and transported between Australian ports, fares payable in Australia including fares paid by the Commonwealth governmemt for the carriage of migrants under various assisted passage schemes. It also includes the overseas expenditure of Australian ships and aircraft, and premiums (less claims) on marine insurance payable overseas on imports into Australia, less the net earnings on marine insurance business undertaken by Australian firms in respect of both exports and imports.

Item 4*c*. *Travel.* Expenditure less refunds, by Australians visiting overseas for pleasure and for business, which may take the form of travellers' cheques, letters of credit, etc.

Item 4*d*. *Government transactions.* Expenditure overseas for defence, including the pay and allowances of personnel serving overseas, expenditure overseas on diplomatic, consular and trade representation, grants, contributions to international organisations, government pensions paid abroad, administrative expenditure overseas on immigration, and other miscellaneous payments for services.

Item 4*e*. *Other goods and services.* Cinema and television film rentals payable overseas, expenses of Australian firms transacting business overseas, commissions, brokerage, etc., and the value of repairs on goods previously exported for repair and return, etc.

Item 5. Net current expenditure on goods and services—personal consumption. Net expenditure on goods and services for purposes of consumption by persons and private non-profit making bodies serving persons. This item excludes the purchase of dwellings and capital expenditure by non-profit making bodies (included in item 8), and maintenance of dwellings (treated as expenses of private enterprises), but includes personal expenditure on motor vehicles and other durable goods and the imputed rent of owner-occupied dwellings. Purchase of motor vehicles is the estimated expenditure by persons on new motor vehicles, second-hand motor vehicles purchased from business enterprises and public authorities, and net dealers' margins on purchases and sales of motor vehicles within the personal sector. Motor vehicles include cars, station wagons, motor cycles, and motor scooters bought on personal account. The value of income in kind (e.g. food produced and consumed on farms, board and lodging provided free to employees) is included in both personal income and personal consumption expenditure, but goods chargeable to business (expense) accounts are excluded.

Item 6. Net current expenditure on goods and services—financial enterprises. The current expenditure of banks, instalment credit companies, short-term money market companies, and building societies after deduction of bank charges to customers. Charges by instalment credit companies are treated as interest receipts and therefore are not offset against expenditure. This item includes wages, salaries and supplements, indirect taxes, and other payments for goods and services. Public financial enterprises are government businesses (mainly banks, including the Reserve Bank) which operate in a manner analogous to other financial enterprises, in that their current expenditure is largely financed by the net receipt of interest. The interest received by government housing authorities is treated as a receipt by public financial enterprises, but their other receipts, including net profit on sale of houses, and all their expenditure, are included in those of public trading enterprises.

Item 7. Net current expenditure on goods and services—public authorities. Expenditure by public authorities (not public enterprises) which does not result in the creation of fixed tangible assets or in the acquisition of land, buildings or second-hand goods (other than imported). It comprises expenditure on wages, salaries, and supplements, and on goods and services other than fixed assets and stocks. Fees, etc. charged by public authorities for goods sold and services rendered are offset against purchases. Net expenditure overseas by public authorities and purchases from public enterprises are included. All expenditure on defence is classified as current.

Item 8. Gross fixed capital expenditure—private. Expenditure on fixed assets whether for additions or replacements. This item includes expenditure on dwellings (item 8*a*), other building and construction (item 8*b*), and vehicles, plant, machinery, etc. (item 8*c*). It includes also expenditure on second-hand assets (other than houses purchased from public authorities) as well as new assets, less sales of existing assets. Expenditure on ordinary repair and maintenance of fixed assets is excluded as being chargeable to current account. Major additions are, however, regarded as capital expenditure. New dwellings purchased by persons from public housing authorities are included in private capital expenditure.

Item 9. Gross fixed capital expenditure—public enterprises. Expenditure on fixed assets whether for additions or replacements, including wages and salaries paid by public enterprises in connection with capital works.

Item 10. Gross fixed capital expenditure—public authorities. Expenditure on fixed assets whether for additions or replacements other than for defence purposes. Because it has not been possible to make a satisfactory dissection, all expenditure on roads, including maintenance, is classified as fixed capital expenditure. Expenditure on housing, included in this item, includes the estimated expenditure on construction of dwellings for rental purposes and hostels for migrants and others, but excludes houses built for sale, which are included in private capital expenditure. Also excluded are advances under the *War Service Homes Act* and other advances for financing home purchase schemes, and expenditure on development and sub-division of land for residential purposes.

Item 11. Increase in value of stocks. The change in book value of non-farm stocks held by trading enterprises and public authorities (item 11*b*) and the change in the value of farm stocks (item 11*a*).

Item 12. Statistical discrepancy. The difference between the sum of the direct estimates of gross national product and imports of goods and services on the one hand and the sum of the estimates of components of gross national expenditure and exports of goods and services on the other hand. Conceptually these two totals are the same. Inclusion of the discrepancy on the expenditure side of the national production account implies nothing as to the relative accuracy of the estimates of gross national product and expenditure. Similarly its inclusion in the capital account does not imply that estimates in this table are less accurate than those in other tables, or that capital expenditure estimates are less accurate than estimates on the receipts side of this account.

Item 13. *Exports of goods and services.* The value of goods exported overseas and receipts from overseas for other goods and services. In Table 6 this item is sub-divided into the following components.

Item 13*a*. *Exports f.o.b.* The recorded trade figures adjusted for balance of payments purposes. The adjustments are similar to those made to the recorded import figures except that no change is made to the basis of valuation. The adjustment for unrecorded exports includes exports of uranium ores.

Item 13*b*. *Transportation.* The expenditure of overseas carriers in Australian ports, the overseas earnings of ships owned or chartered by Australian operators, and earnings by Australian airlines overseas.

Item 13*c Travel.* Expenditure less refunds by persons visiting Australia for pleasure or business, which may take the form of travellers' cheques, letters of credit, etc. including expenditure in Australia of foreign students studying under the Colombo Plan; and earnings of Australian domestic airlines for the carriage of overseas visitors over Australian domestic air routes.

Item 13*d*. *Government transactions.* Receipts for services rendered by the Australian Government to other governments and international organisations, and other payments in Australia by foreign governments on defence and other projects, on diplomatic, consular and trade representation, and for pensions paid in Australia.

Item 13*e*. *Other goods and services.* The value of Australian production of gold less net industrial usage, business expenses of overseas firms in Australia, and commissions, brokerage, etc.

Item 14. *Depreciation allowances.* The financial provisions made for depreciation which are deducted to obtain net income. The estimates represent, in the main, amounts allowed under income tax legislation, but include also the estimated depreciation on tenanted and owner-occupied dwellings and provisions made by public enterprises. This item is divided into depreciation allowances of trading enterprises (item 14*a*) and of financial enterprises (item 14*b*).

Item 15. *Interest, etc.* Comprises interest, non-dwelling rent and royalties. This item appears in most accounts as receipts and payments of interest, etc., but in the case of some entries the amounts are combined with dividends and overseas profits. The item is shown net of intra-sector receipts and payments. Payment of interest, etc. by public enterprises is included in item 15*g*. Payment of interest, etc, by trading enterprises (item 15*a*) includes interest charged on borrowings for the purchase of houses by persons, which is treated as an appropriation from the gross operating surplus of dwellings owned by persons. Non-dwelling rent includes only actual payments and is estimated net of the expenses of the owner of the premises on rates, maintenance, etc., which are treated as working expenses of the enterprises renting the building. Royalties include mining and forestry royalities paid to public authorities, and royalties and fees for use of trade marks, patents, etc. paid overseas.

Item 16. *Income tax, estate and gift duties.* Income tax payable by trading and financial companies (items 16*a* and 16*b*) and persons (item 16*c*) are amounts payable at rates of taxation applicable in each year. Income tax payable by companies in respect of the most recent year's income is estimated on the basis of rates of tax applicable in respect of the preceding year's income. The difference between the amounts of income tax payable and the cash receipts by public authorities (part of item 16*e*) is included in item 16*f*. Income tax payable by persons (item 16*c*) includes the total income tax payable by individuals on all forms of income whether wages, business income or property income. Estate and gift duties (item 16*d*) are the amounts actually paid by persons in that year.

Item 17. *Dividends.* All receipts and payments of dividends, including dividends payable overseas and the remitted profits of Australian branches of overseas enterprises. Dividends payable (items 17*a* and 17*c*) are the dividends declared by trading and financial companies in respect of the year (including an estimate of dividends to be declared in respect of the most recent year). Receipts of dividends (other than dividends receivable from overseas subsidiaries) are cash receipts, and the difference between the amounts payable and received is included in item 17*h*. The items are shown net of intra-sector receipts and payments.

Item 18. *Undistributed income.* The undistributed income of companies comprising trading enterprises (item 18*a*) and financial enterprises (item 18*c*) is the balance of total company income, including profits receivable from overseas (items 18*b* and 18*d*) after deduction of income tax and dividends payable, and is equal to the sum of undistributed income accruing to overseas residents (item 18*f*) and undistributed company income accruing to residents (item 18*g*). Profits receivable from overseas is the unremitted part of profits earned by overseas branches of Australian companies and undistributed profits of overseas subsidiaries of Australian companies.

Item 19. *Unincorporated enterprises income.* The gross operating surplus of unincorporated enterprises less depreciation allowances and interest, etc. paid. It comprises the income of farm unincorporated enterprises (item 19*a*) and the income of all other unincorporated enterprises (item 19*b*).

Item 20. *Personal income from dwelling rent.* The gross operating surplus of dwellings owned by persons less depreciation allowances and interest, etc. paid.

Item 21. *Public enterprises income.* Includes income of public trading enterprises (item 21*a*) and income of public financial enterprises (item 21*b*). For trading enterprises it is equal to gross operating surplus after the deduction of depreciation allowances; for financial enterprises it is the net income after depreciation allowances, interest paid, and net current expenditure on goods and services by government banks are deducted from total receipts of interest and non-dwelling rent. Depreciation allowances deducted in arriving at the income of public trading enterprises are those shown in their published accounts, except in the case of enterprises whose accounts are included in the Commonwealth or State budgets and are analysed on the basis of their cash accounts (in which depreciation is not charged).

Item 22. *Retained investment income of life insurance funds, etc.* Total dividends, interest, etc. received by life insurance and superannuation funds, less rent and interest paid, depreciation allowances, income tax and dividends payable.

Item 23. *Overseas grants, contributions and remittances.* All transfers to or from overseas on public authority or private account which are not payments for goods and services or payments of dividends, interest, etc.

Item 23*a*. *Personal remittances overseas.* Gifts of money by resident persons and private institutions, payments for sustenance, and transfers of emigrants' funds and legacies from Australia to overseas, together with the value of goods exported as gifts.

Item 23*b*. *Personal remittances from overseas.* Gifts of money received from non-resident persons and private institutions, receipts for sustenance, and transfers of immigrants' funds and legacies from overseas to Australia.

Item 23*c*. *Public authority overseas grants and contributions.* Grants to, and payments made on behalf of the Territories of Papua and New Guinea, and expenditure overseas in respect of technical assistance and relief under the Colombo Plan and United Nations projects. Includes contributions to United Nations and other organisations due by virtue of membership of these organisations.

Item 24. *Personal saving.* The excess of personal income over the sum of personal consumption expenditure, interest paid, income tax payable, estate and gift duties paid, and remittances overseas. Personal saving is estimated as the balancing item in the personal current account. It includes saving through life insurance and superannuation funds (defined as premiums, etc. paid less claims, etc. received and administrative expenses of life insurance offices) and the increase in assets of marketing authorities. Personal saving may also take the form of increases in holdings of cash and net purchases of securities, the net increase in bank deposits less advances, the reduction in the outstanding advances of instalment credit companies to persons and unincorporated enterprises, and the increase in the equity of persons in dwellings and in capital equipment, buildings and stocks of unincorporated enterprises.

Item 25. *Cash benefits.* Current transfers to persons from public authorities in return for which no services are rendered or goods supplied. Principal components are scholarships; hospital, medical, pharmaceutical, maternity, sickness, and unemployment benefits; child endowment; widows', age, invalid, and repatriation pensions; and attendance money for waterside workers.

Item 26*a*. *Grants towards private capital expenditure.* Grants to meet part of the costs of private capital expenditure, e.g. Commonwealth Home Savings grants, grants towards construction of science laboratories in private schools and houses for aged persons, payments under the *Currency Act* in relation to the conversion of accounting and other machines following introduction of decimal currency, etc.

Item 26*b* *Devaluation compensation.* Compensation to primary industry marketing authorities for losses on overseas debts outstanding at the time of sterling devaluation.

Item 27. *Public authorities surplus on current account.* The excess of current revenue, including income of public enterprises, over current outlay. Current outlay includes current expenditure on goods and services, as defined in item 7, and transfer payments (interest, cash benefits, subsidies, grants towards private capital expenditure, and overseas grants). The surplus is transferred to the capital account where it is shown as part of total funds available for financing capital outlay.

Item 28. *Overseas balance on current account.* The excess of payments to the rest of the world on current account over receipts from the rest of the world on current account. In the national capital account it is shown divided into drawings on Australia's overseas monetary reserves (item 28*a*) and net apparent capital inflow (item 28*b*).

CHAPTER 18

PRIVATE FINANCE

Further information on the subjects dealt with in this chapter is contained in the annual bulletins *Banking and Currency* and *Insurance and Other Private Finance.* Current information is contained in the *Quarterly Summary of Australian Statistics,* the *Monthly Review of Business Statistics,* the *Digest of Current Economic Statistics* (monthly), and the monthly mimeographed statements *Banking Statistics* (bulletin and preliminary statement), *Savings Bank Statistics* (bulletin and preliminary statement), *Monthly Bulletin of Life Insurance Statistics,* and *Finance Companies: Australia.* The annual mimeographed bulletins *Australian Fire, Marine and General Insurance Statistics* and *Life Insurance* contain the latest information on these subjects. Other relevant mimeographed statements are: *Finance Companies,* 1968; *Instalment Credit for Retail Sales; Unit Trusts, Land Trusts and Mutual Funds; New Capital Raisings by Companies in Australia;* and *Capital and Maintenance Expenditure by Private Business in Australia*—quarterly; *Government Pension and Superannuation Schemes,* 1966–67; *Survey of Private Pension and Retiring Allowance Schemes,* 1962–63; *Survey of Selected Private Pension Funds,* 1967–68; and *Registered Building Societies,* 1966–67. Preliminary monthly statements *Instalment Credit for Retail Sales* and preliminary quarterly estimates of *New Capital Raisings by Companies in Australia* are also issued.

CURRENCY

Until 13 February 1966 Australian currency was based on the British unit, which is the pound (£) divided into 20 shillings (s) each of 12 pence (d). A decimal currency system was introduced in Australia on 14 February 1966 based on a major unit—the dollar—equal to ten shillings in the old currency. The minor unit—the cent—is one-hundredth part of the major unit and is equal to 1.2 pence in the old currency. Decimal notes and coins became legal tender from 14 February 1966. The par value of the Australian dollar, under the terms of the International Monetary Fund, was established at 0.99531 grams of fine gold.

The official changeover arrangements provided for a dual currency and for a transition period of eighteen months to two years following the changeover. From the changeover day all cheques and other bills of exchange and all promissory notes had to be executed in dollars and cents. During the transition period, however, contracts and other monetary transactions were permitted in terms of either £ s. d. or $ c.

Since the end of the transition period (1 August 1967 fixed by proclamation) contracts and other documents have had to be made out in terms of $ c. All references to £ s. d. in existing contracts, agreements, etc. with continuing effect are converted automatically into their exact equivalents in decimal currency. Payments of amounts owing in £ s. d. are made in $ c on a nearest-cent basis according to the conversion table shown in the Currency Act (*see* Year Book No. 52, *page* xvi). Threepences, pennies and halfpennies are legal tender only in multiples of sixpence. All £ s. d. notes and coins from sixpence upwards continue to be legal tender on the same basis as decimal notes and coins.

Historical notes of the arrangements for the introduction of decimal currency and the relationship between £ s. d. and $ c are published in Year Book No. 52, pages 671–4.

Australian coinage

Prior to Federation in 1901 the coins circulating throughout Australia were many and varied. For a full account of the history of pre-Federation coinage *see* Year Book, No. 51, 1965, pages 812–14. After Federation the only coins which were legal tender within Australia until 1909 were English coins.

The Constitution in 1901 gave the Commonwealth Parliament power to make laws with respect to coinage and in 1909 the Coinage Act was passed prescribing the standard weight and fineness of coins. The first coins exclusively for circulation in Australia—silver (925 fine) florins, shillings, sixpences and threepences—were minted in 1910 by the Royal Mint, London, followed by bronze coins in 1911. The Melbourne Branch of the Royal Mint produced in 1916 the first Commonwealth coins (pence) minted in Australia. The Sydney Branch of the Royal Mint commenced production of halfpennies in 1919 and in 1922 the Perth Branch minted its first pennies.

The Commonwealth Treasury administered the Coinage Act which was repealed and replaced by the *Currency Act* 1965. All coins produced under authority of these two Acts have been ordered by the Treasury.

Australian mints

Brief historical notes relating to Australian mints and details of pre-decimal Australian coins obtained from each mint to 30 June 1965 are given in Year Book No. 52, page 675.

The construction of the Royal Australian Mint in Canberra provided the Commonwealth Government for the first time with facilities for minting its own coinage. All Australia's coin requirements are now met by the Royal Australian Mint, with the Melbourne and Perth branches of the Royal Mint providing some bronze coins on contract to the Commonwealth Treasury.

Coins in circulation

Brief historical notes relating to the Australian pre-decimal coinage are given in Year Book No. 37, pages 557 and 558. For weight, metal composition, etc. of Australian pre-decimal coins in circulation *see* Year Book No. 39, page 697.

The net issues of Australian pre-decimal silver and bronze coins from 1910 to 30 June 1968 were: crown (5s.), $551,000; florin (2s.), $21,109,000; shilling (1s.), $15,298,000; sixpence (6d.), $11,492,000; threepence (3d.), $8,555,000; total silver coin, $56,874,000; penny (1d.), $4,076,000; half-penny (½d.), $1,081,000; total bronze coin, $5,157,000. Except in the total, no allowance has been made for $131,000 worth of damaged silver coin, for which denominations are not available, withdrawn since 1910. Australian decimal coins issued from 14 February 1966 to 30 June 1968 were: 50 cents, $18,147,000; 20 cents, $27,586,000; 10 cents, $10,151,000; 5 cents, $7,341,000; 2 cents, $7,395,000; 1 cent, $4,510,000; total $75,130,000.

In the following table details are given of the value of decimal coins issued, the cost of bullion, the cost of minting, and sundry expenses connected with the issue, and the surplus during the years 1965–66 to 1967–68. A similar table on pre-decimal coinage was shown on page 676 of Year Book No. 53 and in earlier issues.

AUSTRALIAN DECIMAL COIN: COSTS OF COIN ISSUED
($'000)

Year	*Cost of bullion*	*Cost of minting*	*Freight and sundry charges*	*Total cost*	*Face value of coin issued (a)*	*Surplus (b)*
Silver—						
1965–66 . . .	9,077	406	106	9,589	11,607	2,018
1966–67 . . .	3,808	170	34	4,012	4,869	857
1967–68 . . .	1,350	80	2	1,432	1,671	239
Cupro-nickel—						
1965–66 . . .	510	631	168	1,309	10,429	9,120
1966–67 . . .	772	835	145	1,752	14,406	12,654
1967–68 . . .	1,341	1,732	43	3,116	20,243	17,127
Bronze—						
1965–66 . . .	1,493	2,686	260	4,439	7,368	2,929
1966–67 . . .	543	930	110	1,583	2,714	1,131
1967–68 . . .	407	589	36	1,032	1,823	791
Total—						
1965–66 . . .	11,080	3,723	534	15,337	29,404	14,067
1966–67 . . .	5,123	1,935	289	7,347	21,989	14,642
1967–68 . . .	3,098	2,401	81	5,580	23,737	18,157

(*a*) Includes selected and proof pieces. (*b*) Used to assist in purchase of pre-decimal coin withdrawn from circulation.

Gold receipts and issues

Since early in the 1939–45 War all gold has been acquired by the Reserve Bank, and the export and use of gold has been subject to regulation by the Commonwealth Government. All trading banks in Australia, the Deputy Master of the branch of the Royal Mint in Perth, and three private refining companies are authorised under the Banking (Gold) Regulations to deal in gold on behalf of the Reserve Bank. The Melbourne Mint ceased to deal in gold in 1964. The Royal Australian Mint at Canberra is not authorised to receive and issue gold.

Details of the production of gold, subsidy payable, etc. are given in the chapter Mineral Industry.

Price of gold

The following table shows the average prices of gold, the average values of the sovereign's gold content in London, and the sovereign's Reserve Bank buying price in Australia for the years 1963–64 to 1967–68. The average price of gold in Australia is fixed by the Reserve Bank and at present reflects the parity value of Australian currency established in conformity with the *International Monetary Agreements Act* 1947.

PRICE OF GOLD: LONDON AND AUSTRALIA, 1963-64 TO 1967-68

	London		Australia		
				Sovereign	
Year	*Average price per fine oz*	*Average value of sovereign's gold content*	*Average price per fine oz*	*Reserve Bank buying price*	*Equivalent to a premium on mint par value of—*
	£stg s d	£stg s d	$	$	per cent
1963–64 . . .	12 10 9	2 19 1	31.25	7.25	267.8
1964–65 . . .	12 11 8	2 19 3	31.25	7.25	267.8
1965–66 . . .	12 11 8	2 19 3	31.25	7.25	267.8
1966–67 . . .	12 11 11½	2 19 3	31.25	7.25	267.8
1967–68 . . .	12 11 11½	2 19 3	31.25	7.25	267.8

In December 1951 arrangements were made whereby producers could sell a proportion of newly-mined gold for industrial purposes on overseas premium markets. Under these arrangements gold is acquired by the Reserve Bank in the usual manner and sold, at the Bank's buying price, to an association representing gold producers participating in the scheme. The association pays the Bank's handling charges and the costs of preparation of the gold and makes arrangements for export and sale. Profits earned by the association after meeting administrative expenses are distributed to members in proportion to the quantity of gold delivered to the Reserve Bank. Until August 1952, when permission was given for the export of fine gold, gold exported under this arrangement was not to exceed a fineness of 22 carats (11/12ths).

The average prices per fine ounce in Australian currency obtained for gold exported under this scheme for each month during 1967–68 were: July $31.500; August $31.527; September $31.577; October $31.570; November $31.607; December $31.669; January $31.552; February no gold sales reported; March $31.378; April $32.838; May $34.642; and June $37.034.

The Australian note issue

In 1901 notes in circulation in Australia consisted of bank notes payable in gold coin and issued by the trading banks, and Queensland Treasury notes. Bank notes circulated in all States except Queensland, but were not legal tender except for a brief period in 1893 in New South Wales. There were, however, some restrictions on their issue or other provisions for the protection of the public. Queensland Treasury notes were issued by the Queensland Government and were legal tender in that State. Notes of both categories continued in circulation until 1910, when the *Australian Notes Act* 1910 and *Bank Notes Tax Act* 1910 were passed by the Commonwealth Parliament. The *Australian Notes Act* 1910 prohibited the circulation of State notes as money and the *Bank Notes Tax Act* 1910 imposed a tax of ten per cent per annum on 'all bank notes issued or re-issued by any bank in the Commonwealth after the commencement of this Act, and not redeemed'. These Acts put an end to the issue of notes by the trading banks and the Queensland Treasury. The *Reserve Bank Act* 1959 expressly prohibits persons, including States, from issuing bills or notes payable to bearer on demand and intended for circulation.

The *Reserve Bank Act* 1965 authorised the Bank to issue Australian notes in denominations of $1, $2, $5, $10, $20, or $50, or in any other denomination that the Treasurer, by instrument of writing published in the Gazette, determines. The Act provided that each note of the previous currency should have the value in dollar currency set out in the following table:

10s.	$1
£1	$2
£5	$10
£10	$20
£20	$40
£50	$100
£100	$200
£1,000	$2,000

The Act came into force on 14 February 1966, and notes of $1, $2, $10, and $20 denominations were issued forthwith as legal tender to any amount throughout Australia. A description of these notes is published in Year Book No. 52, page 678. On 29 May 1967 $5 notes were issued throughout Australia and the Territory of Papua and New Guinea. A description of the $5 note is published in Year Book No. 53, page 678.

Gold reserves against the note issue

The *Australian Notes Act* 1910 provided that the Treasurer should hold, in gold coin, a reserve of an amount not less than one-fourth of the notes issued up to $14,000,000 and an amount equal to the excess over $14,000,000. In 1911 this provision was amended and the Treasurer was required only to hold, in gold coin, an amount not less than one-fourth of the total amount of Australian notes issued. In June 1931, to permit further shipments of gold to meet short-term obligations in London, an amendment to the Commonwealth Bank Act provided for the reduction of the gold reserve for the two years ended 30 June 1933 to not less than 15 per cent. The reserve was to be increased, by graduated steps, to 25 per cent by 30 June 1935. In May 1932 a further amendment to the Commonwealth Bank Act provided that the reserve might be held 'in gold or in English sterling or partly in gold and partly in English sterling'. English sterling was defined as 'currency which is legal tender in the United Kingdom, and included (*a*) balances standing to the credit of the Bank at the Bank of England or at any other of its bankers in London; (*b*) Bills of Exchange or advances secured by Bills of Exchange which (i) are payable in the United Kingdom in currency which is legal tender in the United Kingdom; (ii) will mature in not more than three months, and the security for the payment of which bills is, in the opinion of the Bank, satisfactory; and (*c*) Treasury Bills or other securities of the United Kingdom which will mature in not more than three months'.

The statutory reserve against the note issue was abolished by the *Commonwealth Bank Act* 1945 which provided that the assets of the Note Issue Department should be held in gold, on deposit with any bank, or in securities of the Government of the United Kingdom or of the Commonwealth or a State. This provision was continued in the *Reserve Bank Act* 1959.

Australian notes in circulation

AUSTRALIAN NOTES IN CIRCULATION, JUNE 1964 TO 1968
($'000)

	Last Wednesday in June—				
Denomination	*1964*	*1965*	*1966*	*1967*	*1968*
$1 and 10s	27,550	28,396	32,204	33,214	34,881
$2 and £1	141,290	143,308	138,164	127,997	117,929
$5	..	..	..	42,829	57,444
$10 and £5	390,728	392,980	369,247	389,201	401,079
$20 and £10	304,964	297,479	309,713	344,943	394,667
£20	4	2	2	1	1
£50	56	45	43	43	42
£100	62	41	41	40	40
£1,000	5,656	164	..	..	..
Held by banks	*133,710*	*138,783*	*154,117*	*162,006*	*159,726*
Held by public	*736,600*	*723,631*	*695,298*	*776,263*	*846,357*
Total	**870,310**	**862,414**	**849,414**	**938,269**	**1,006,083**

Reserve Bank—Note Issue Department

RESERVE BANK OF AUSTRALIA: NOTE ISSUE DEPARTMENT LIABILITIES AND ASSETS, 30 JUNE 1967 AND 1968

($ million)

Liabilities	*1967*	*1968*	*Assets*	*1967*	*1968*
Notes on issue(*a*)	930.1	998.5	Gold and balances held abroad (including money at short call)	394.5	315.5
Special reserve—Premium on gold sold	9.5	..	Other overseas securities	174.8	151.4
Other liabilities(*a*)	22.1	20.3	Government securities (including Commonwealth Treasury bills)	391.7	501.0
			Other assets	0.7	(*b*)50.9
Total	**961.7**	**1,018.8**	**Total**	**961.7**	**1,018.8**

(*a*) Notes of a denomination not exceeding one pound which have been on issue for more than twenty years and notes of a denomination exceeding one pound which have been on issue for more than forty years are not included in the item 'Notes on issue' but are included in the item 'Other liabilities.' (*b*) Increase is due mainly to changes in the form of investments following devaluation of sterling.

Until June 1951 all profits of the Note Issue Department, with the exception of $4,000,000 and $2,400,000 paid to the capital accounts of the Rural Credits Department and Mortgage Bank Department respectively, were paid to the Commonwealth Consolidated Revenue Fund. For the years 1951–52 to 1955–56 the profits were distributed as follows: (*a*) $1,000,000 per annum to the capital accounts of the Commonwealth Trading Bank (prior to 3 December 1953 the General Banking Division of the Commonwealth Bank) and the several departments of the Commonwealth Bank, distributed two-sevenths each to the Commonwealth Trading Bank, Mortgage Bank Department and Industrial Finance Department and one-seventh to the Rural Credits Department, and (*b*) the balance to the Commonwealth Consolidated Revenue Fund. Since 1955–56 the profits have been paid to the Commonwealth Consolidated Revenue Fund. Profits of the Note Issue Department in 1967–68 amounted to $23,041,935.

Rates of exchange

In the following table the par of exchange (based on par values agreed with the International Monetary Fund) and average telegraphic transfer selling rates of exchange for Sydney on a number of overseas countries are shown. Generally, the averages, which are averages of daily quotations, are based on rates quoted by the Commonwealth Trading Bank. Where these were not available, rates used by the Department of Customs and Excise in converting import values to $A for purposes of calculating customs duty are shown.

OVERSEAS EXCHANGE RATES: PAR OF EXCHANGE AND AVERAGE TELEGRAPHIC TRANSFER SELLING RATES FOR SYDNEY ON OVERSEAS COUNTRIES, 1967-68

		Australian decimal currency equivalents				*Australian decimal currency equivalents*	
Country	*Basis of quotation*	*Par of exchange (a)*	*Selling rate 1967–68*	*Country*	*Basis of quotation*	*Par of exchange (a)*	*Selling rate 1967–68*
Belgium	Francs to $A1	56.00	54.99	Netherlands	Guilders to $A1	4.054	3.993
Canada	Dollars to $A1	1.211	1.266	New Zealand	$A to $NZ1	1.00	1.0986
Ceylon	Rupees to $A1	6.667	5.990	Norway	Kroner to $A1	8.000	7.91
China (mainland)	New Yuan to $A1	(*b*)	4.74	Pakistan	Rupees to $A1	5.333	5.284
China (Taiwan)	Dollars to $A1	(*c*)	44.66	Portugal	Escudos to $A1	32.200	31.90
Denmark	Kroner to $A1	8.40	8.04	Singapore	Dollars to $A1	3.429	3.396
Fiji	$A to £F1	(*b*)	2.1368	South Africa	Rands to $A1	0.800	0.795
Finland	Markkas to $A1	4.704	4.36	Sweden	Kronor to $A1	5.794	5.718
France	Francs to $A1	5.530	5.448	Switzerland	Francs to $A1	(*b*)	4.805
Germany, Fed. Rep. of	Deutsche Marks to $A1	4.480	4.425	United Arab Republic	£E to $A1	0.390	0.475
Hong Kong	Dollars to $A1	(*b*)	6.611	United Kingdom	$A to £stg1	2.143	2.2948
India	Rupees to $A1	8.400	8.330	United States of America	Dollars to $A1	1.120	1.1122
Italy	Lire to $A1	700.00	690.00	U.S.S.R.	Roubles to $A1	(*b*)	1.004
Japan	Yen to $A1	403.20	400.95				

(*a*) As at 30 June 1968, established under International Monetary Fund Agreement. (*b*) Not a member of the International Monetary Fund. (*c*) No par value established.

VOLUME OF MONEY

VOLUME OF MONEY: AUSTRALIA, JUNE 1964 TO 1968

(*Source:* Reserve Bank of Australia)

($ million)

June—	*Notes and coin in hands of public*	*Deposits of public with all cheque-paying banks(a)*		*Deposits with all savings banks(b)*	*Total volume of money*
		Current	*Fixed*		
1964	815	2,917	1,380	4,444	9,556
1965	814	2,977	1,688	4,858	10,337
1966	783	3,033	1,898	5,223	10,938
1967	882	3,192	2,026	5,724	11,824
1968	964	3,450	2,191	6,200	12,805
December(*c*) 1968 . .	1,069	3,683	2,376	6,507	13,635

(*a*) Excludes Government and inter-bank deposits, but includes deposits of the public with the Reserve Bank. (*b*) Interpolated 'weekly average' based on end of month figures. (*c*) Excludes one Wednesday.

BANKING

The Australian banking system has developed along the lines of the British system with widespread branch banking conducted by relatively few banks.

Development since federation

With federation in 1901 the new Commonwealth Parliament was given power, under section 51 of the Commonwealth Constitution, to legislate with respect to 'Banking, other than State Banking, also State Banking extending beyond the limits of the State concerned, the incorporation of banks, and the issue of paper money'. In 1911 the Commonwealth entered the field of banking, with the establishment of the Commonwealth Bank of Australia, which conducted both trading bank and savings bank operations. A separate Commonwealth Savings Bank was established in 1928.

Central bank

Central banking functions of the Commonwealth Bank developed gradually over the years prior to and during the second world war. In November 1935 a Royal Commission was appointed by the Commonwealth Government to inquire into the monetary and banking systems in operation in Australia and to report whether any, and if so what, alterations were desirable in the interests of the people of Australia as a whole, and the manner in which any such alterations should be effected. The Commission presented its report in July 1937, and a summary of the recommendations appears in Year Book No. 31, page 1010.

In 1945 the Commonwealth Government legislated to give full legal effect to the central banking functions already being exercised by the Commonwealth Bank of Australia and to regulate the banking system as a whole. The Commonwealth Bank of Australia further developed mainly as a central bank when from 3 December 1953 the Commonwealth Trading Bank of Australia was established to take over most of the general trading bank functions of the Commonwealth Bank of Australia.

Legislation in 1959 completed the separation of the trading and central banking functions of the Commonwealth Bank of Australia with the establishment of the Commonwealth Development Bank of Australia under the *Commonwealth Banks Act* 1959 to take over the Industrial Finance Department and Mortgage Bank Department of the Commonwealth Bank of Australia.

A new bank, the Reserve Bank of Australia, was established under the *Reserve Bank Act* 1959 as the nation's central bank to administer the provisions of a new banking Act (*Banking Act* 1959). A statutory corporation, The Commonwealth Banking Corporation, was set up under the *Commonwealth Banks Act* 1959 to control the Commonwealth Trading Bank of Australia, the Commonwealth Development Bank of Australia, and the Commonwealth Savings Bank of Australia.

Trading banks

Commercial banking in Australia is predominantly carried on by eight major trading banks. One of these banks is owned by the Commonwealth Government and seven are privately owned companies established by Act or Charter or incorporated under State or British law. Two of these private banks are owned by British interests. Since 1945 no new private trading banks may be established without the approval of the Commonwealth. State-owned trading banks operate in three States under State law and confine their activities to their own States. One small trading bank confines its operations to one city and three foreign banks operate on a restricted basis.

A new bank, The Australian Resources Development Bank Limited, owned by the trading banks of Australia, was established in 1967. The bank uses funds raised from banks, the public and overseas lenders in the financing of large-scale projects whose principal activity is the development of Australia's natural resources. Finance is made available either by direct lending or by the refinancing of loans by the trading banks. The Bank commenced operations in February 1968.

Term Loan Fund

Lending by trading banks is generally conducted on an overdraft basis. A departure from this practice followed discussions during 1961–62 involving the Commonwealth Government, the Reserve Bank and the major trading banks, which resulted in arrangements whereby the banks agreed to create a fund known as the Term Loan Fund, the resources of which would be employed to make loans for capital expenditure on production in the rural, industrial and (to a lesser extent) commercial fields and to finance exports. The loans would be made for fixed terms, varying usually between three and eight years. The term lending arrangements operated from April 1962.

Farm Development Loan Fund

Discussions in March 1966 between the Commonwealth Government, the Reserve Bank and the major trading banks resulted in the establishment of a fund known as the Farm Development Loan Fund, from which resources would be available to provide rural producers, particularly smaller producers, with greater access to medium and long-term finance. The Fund was established in April 1966.

Savings banks

Until 1956 savings bank operations were, apart from two small trustee banks in Tasmania, conducted by the Commonwealth Government and some State Governments. In January 1956 private savings banks were established as subsidiary companies by two of the private trading banks. By mid-1962 all the major private trading banks had established savings bank subsidiary companies.

Current legislation

Operations of banks and banking in Australia are currently governed by (i) Commonwealth legislation enacted in 1959 in respect of banking other than State banking, and (ii) State legislation relating to the incorporation of banks and management of State banks.

Commonwealth banking legislation

(*a*) The *Banking Act* 1959–1967 provides for the regulation of banking and for the protection of the currency and the public credit of the Commonwealth. This Act, which replaced the *Banking Act* 1945–1953, was assented to on 23 April 1959 and came into operation on 14 January 1960 as the *Banking Act* 1959. It was amended by the *Banking Act* 1965 and the *Statute Law Revision* (*Decimal Currency*) *Act* 1966 in order to make certain changes required by the change to decimal currency and by the *Banking Act* 1967 relating to the Papua and New Guinea Development Bank and the Australian Resources Development Bank Limited. It applies to all banks, including savings banks, operating in Australia or the Territories of the Commonwealth except State banks trading in their own State. The objects of the Act are: (i) to provide a legal framework uniform throughout Australia for regulating the banking system; (ii) to safeguard depositors of the banks from loss; (iii) to provide for the co-ordination of banking policy under the direction of the Reserve Bank; (iv) to control the volume of credit in circulation and bank interest rates; (v) to mobilise and to provide machinery for the control of the foreign exchange and gold resources of the Australian economy. A summary ot the main provisions of the *Banking Act* 1959 is given in Year Book No. 46, pages 759–60.

(*b*) The *Reserve Bank Act* 1959–1966 provides for the constitution and management of the Reserve Bank of Australia and the management of the Australian note issue.

(*c*) The *Commonwealth Banks Act* 1959–1968 provides for the constitution and management of the Commonwealth Banking Corporation, Commonwealth Trading Bank of Australia, Commonwealth Savings Bank of Australia, and Commonwealth Development Bank of Australia.

The Commonwealth Banking Corporation came into being on 14 January 1960. It is the controlling body for the Commonwealth Trading Bank, Commonwealth Savings Bank and Commonwealth Development Bank. Under the *Banking Act* 1959–1967 the Corporation and its constituent banks are subject to the same central banking controls as are the private trading banks.

The Board of the Corporation consists of the Managing Director of the Corporation, the Deputy Managing Director, the Secretary to the Treasury, and eight other members appointed by the Governor-General of whom one is Chairman and another Deputy Chairman. In addition, there is an Executive Committee of the Board for each of the three separate banks. These Executive Committees are appointed by the Treasurer, after consultation with the Board, and are charged with taking such action as is necessary to ensure that effect is given by the respective banks to the policies laid down for them and to any directions given by the Board in relation to their affairs. Under the Board the Corporation is managed by the Managing Director and the Deputy Managing Director. Each of the three constituent banks of the Corporation has its own statutory functions and responsibilities and its separate identity within the framework of the Corporation. Each bank is managed by a General Manager under the Managing Director of the Corporation.

On page 622 details are given of the assets and liabilities of the Commonwealth Development Bank. Details for the Commonwealth Savings Bank are shown on pages 644–6. Details for the Commonwealth Trading Bank are included in statistics of cheque-paying banks—Major Trading Banks, on pages 624–30.

State banking legislation

The State Acts under which the various banks are incorporated differ. While some of the older banks were incorporated by special Act or Charter, e.g. the Bank of New South Wales by Act of Council 1817, the Bank of Adelaide by Act of the South Australian Parliament, and the Bank of New Zealand by Act of the General Assembly of New Zealand, most of the banks are incorporated under a Companies Act of the States or the United Kingdom. This is also the case with those banks which were reconstructed after the financial crisis of 1893. State banks, constituted under State Acts, transacting general banking business are The Rural Bank of New South Wales, the State Bank of South Australia, and the Rural and Industries Bank of Western Australia. State savings banks, constituted under State Acts, transacting savings bank business are The State Savings Bank of Victoria, The Savings Bank of South Australia and the Savings Bank Division of the Rural and Industries Bank of Western Australia (*see* pages 643–8).

Presentation of banking statistics

Because of the different purposes they serve in the Australian financial system, Australian banks have been divided for statistical purposes into the following four groups and a separate series is presented for each.

(i) *The Reserve Bank of Australia.* Statistics of the Central Banking Business, the Note Issue Department, and the Rural Credits Department are shown separately. (*See* pages 619–21.)

(ii) *The Commonwealth Development Bank of Australia.* The prime purpose of this Bank is to assist in the development of worthwhile enterprises in the field of both primary and secondary industries which would otherwise be unable to obtain the necessary finance on reasonable and suitable terms and conditions. (*See* pages 622–3.)

(iii) *Cheque-paying banks—Major Trading Banks.* These comprise the Commonwealth Trading Bank of Australia, Australia and New Zealand Bank Ltd, The Bank of Adelaide, Bank of New South Wales, The Commercial Bank of Australia Ltd, The Commercial Banking Company of Sydney Ltd, The English, Scottish and Australian Bank Ltd, The National Bank of Australasia Ltd. (*See* pages 623–41.)

All cheque-paying banks. These comprise the major trading banks and the following banks—the Bank of China, Bank of New Zealand, The Brisbane Permanent Building and Banking Co. Ltd, Banque Nationale de Paris, the General Bank Department of the Rural Bank of New South Wales, the State Bank of South Australia, and the Rural Department of the Rural and Industries Bank of Western Australia. (*See* pages 623 and 629–34.)

Australian cheque-paying banks (*see* pages 624–28). These comprise all cheque-paying banks *except* the Bank of China, Bank of New Zealand and Banque National de Paris.

(iv) *Savings Banks.* Savings banks operating at 30 June 1968 were—the Commonwealth Savings Bank of Australia, the Australia and New Zealand Savings Bank Ltd, the Bank of New South Wales Savings Bank Ltd, and the National Bank Savings Bank Ltd (in all States and Territories within and without Australia); The Bank of Adelaide Savings Bank Ltd (all States except Tasmania); The Commercial Savings Bank of Australia Ltd and the E.S. & A.

Savings Bank Ltd (in all States and Territories within Australia), the C.B.C. Savings Bank Ltd (in all States and in the Australian Capital Territory); the State Savings Bank of Victoria, The Savings Bank of South Australia, the Savings Bank Division of The Rural and Industries Bank of Western Australia, and the two trustee banks, The Hobart Savings Bank and Launceston Bank for Savings. (*See* pages 643–52.)

Reserve Bank of Australia

The Reserve Bank of Australia, established under the *Reserve Bank Act* 1959, which came into operation on 14 January 1960, continued in existence the body corporate known as the Commonwealth Bank of Australia. An account of the progress and development of that bank is given in earlier issues of the Year Book (*see* No. 37, pages 570–2, and No. 45, pages 735–7).

The general functions of the Reserve Bank are set out in Section 10 of the *Reserve Bank Act* 1959–1966, which states:

> 'It is the duty of the Board, within the limits of its powers, to ensure that the monetary and banking policy of the Bank is directed to the greatest advantage of the people of Australia and that the powers of the Bank under this Act, the *Banking Act* 1959, and regulations under that Act are exercised in such a manner as, in the opinion of the Board, will best contribute to,
>
> (*a*) the stability of the currency of Australia;
>
> (*b*) the maintenance of full employment in Australia; and
>
> (*c*) the economic prosperity and welfare of the people of Australia.'

In addition to its functions as a Central Bank, the Bank controls the Australian note issue through a Note Issue Department, provides special banking facilities through the Rural Credits Department, and acts as banker to the Commonwealth and some of the States.

Management

Under the provisions of the *Reserve Bank Act* 1959–1966 the policy of the Reserve Bank is determined by a Board consisting of the Governor (Chairman), the Deputy Governor, the Secretary to the Treasury, and seven other members appointed by the Governor-General. The Bank is managed by the Governor, who acts in accordance with the policy of the Board and with any directions of the Board. The Bank is required to inform the Government of the monetary and banking policy of the Board. In the event of a disagreement between the Government and the Board as to whether the monetary and banking policy of the Bank is directed to the greatest advantage of the people of Australia, the Governor-General, acting with the advice of the Executive Council, may determine the policy to be adopted by the Bank.

Central banking business

Under the powers it possessed under the *Commonwealth Bank Act* 1911–1943 and under its war-time powers under the National Security Regulations the Commonwealth Bank gradually assumed the functions of a Central Bank. Part III of the *Commonwealth Bank Act* 1945 formally constituted the Bank as a Central Bank and granted the necessary powers to carry on the business of a Central Bank, and these powers were carried through into the present Act constituting the Reserve Bank. Under the provisions of the *Reserve Bank Act* 1959–1966 the capital for the Central Banking Business is the capital of the Commonwealth Bank for Central Banking purposes immediately prior to 14 January 1960, and such other sums as are transferred from the Reserve Bank Reserve Fund. The profits of the Bank are distributed as follows: (*a*) such sums as the Treasurer, after consultation with the Bank, determines shall be placed to the credit of the Reserve Bank Reserve Fund and (*b*) the remainder shall be paid to the Commonwealth.

Note Issue Department

The Note Issue Department, established in 1920 when the control of the Australian note issue was transferred from the Commonwealth Treasury to the Commonwealth Bank, was maintained in the same form under the *Reserve Bank Act* 1959. The Reserve Bank may, through this Department, issue, re-issue and cancel Australian notes. Under the *Reserve Bank Act* 1959–1966 the profits of the Note Issue Department are paid to the Commonwealth.

Rural Credits Department

The Rural Credits Department, established in 1925 for the purpose of making short-term credit available for the orderly marketing of primary produce, was continued in the same form under the *Reserve Bank Act* 1959. The Reserve Bank may, through this Department, make advances upon the security of primary produce placed under the legal control of the Bank, or other security associated with the production or marketing of primary produce, to co-operative associations or marketing boards formed under the laws of the Commonwealth or a State or Territory of the Commonwealth or other bodies specified by proclamation. The period of the advance shall not exceed one year. Under the provisions of the *Reserve Bank Act* 1959–1966 the capital of the Rural Credits Department is the capital of the Rural Credits Department of the Commonwealth Bank immediately prior to 14 January 1960, and $4,000,000 provided by the Reserve Bank. The profits of the Rural Credits Department are dealt with as follows: (*a*) one-half to the credit of the Rural Credits Department Reserve Fund and (*b*) one-half to the credit of the Rural Credits Development Fund.

Reserve Bank liabilities and assets—all Departments

RESERVE BANK OF AUSTRALIA: LIABILITIES, 30 JUNE 1964 TO 1968

($ million)

					Deposits of trading banks				
30 June—	*Capital and reserve funds*	*Development fund*	*Special reserve—premium on gold sold*	*Australian notes on issue*	*Statutory reserve deposit accounts*	*Other*	*Deposits of savings banks*	*Other deposits, bills payable and other liabilities*	*Total*
				CENTRAL BANKING BUSINESS					
1964	56.5	..	..	..	676.3	101.8	432.3	327.9	1,594.8
1965	61.3	..	..	..	654.7	100.4	429.6	347.2	1,593.2
1966	65.3	..	..	..	471.9	130.2	418.6	351.6	1,437.6
1967	68.8	..	..	..	473.8	98.9	492.5	355.3	1,489.3
1968	60.1	..	..	..	456.4	117.9	495.8	327.6	1,457.8
				NOTE ISSUE DEPARTMENT					
1964	..	..	9.5	856.1	..	..	..	21.1	886.7
1965	..	..	9.5	862.4	..	..	..	21.3	893.2
1966	..	..	9.5	835.3	..	..	..	21.5	866.2
1967	..	..	9.5	930.1	..	..	..	22.1	961.7
1968	..	..	..	998.5	..	..	..	20.3	1,018.8
				RURAL CREDITS DEPARTMENT					
1964	14.2	0.6	..	..	..	..	..	116.1	130.9
1965	14.7	0.6	..	..	..	..	..	227.7	243.1
1966	15.3	0.7	..	..	..	..	..	158.7	174.7
1967	16.0	0.7	..	..	..	..	..	344.2	361.0
1968	16.7	0.8	..	..	..	..	..	212.0	229.6
				TOTAL(*a*)					
1964	70.8	0.6	9.5	856.1	676.3	101.8	432.3	361.6	2,509.0
1965	76.1	0.6	9.5	862.4	654.7	100.4	429.6	382.1	2,515.6
1966	80.7	0.7	9.5	835.3	471.9	130 2	418.6	389.0	2,335.8
1967	84.8	0.7	9.5	930.1	473.8	98.9	492.5	393.6	2,483.9
1968	76.9	0.8	..	998.5	456.4	117.9	495.8	315.9	2 462.2

(*a*) Inter-departmental accounts have been offset.

RESERVE BANK OF AUSTRALIA: ASSETS, 30 JUNE 1964 TO 1968

($ million)

30 June—	Gold and balances held abroad (a)	Other overseas securities	Australian notes, coin	Australian Government securities (b)	Cheques and bills of other banks	Loans, advances, bills discounted, all other assets (c)	Bank premises (d)	Bills receivable and remittances in transit	Total
				CENTRAL BANKING BUSINESS					
1964 .	866.1	122.6	12.7	411.6	5.5	131.6	15.1	29.6	1,594.8
1965 .	506.3	237.1	10.1	464.4	32.6	277.1	22.4	43.1	1,593.2
1966 .	551.5	171.3	24.0	392.2	15.7	220.4	29.1	33.5	1,437.6
1967 .	396.9	168.8	12.4	420.6	9.2	396.1	30.9	54.3	1,489.3
1968 .	349.3	182.0	9.5	536.2	8.0	263.7	33.8	75.3	1,457.8
				NOTE ISSUE DEPARTMENT					
1964 .	546.2	77.1	..	263.3	..	0.1	..	..	886.7
1965 .	381.1	174.1	..	337.8	..	0.2	..	..	893.2
1966 .	435.0	134.8	..	296.2	..	0.2	..	..	866.2
1967 .	394.5	174.8	..	391.7	..	0.7	..	..	961.7
1968 .	315.5	151.4	..	501.0	..	50.9(e)	..	..	1,018.8
				RURAL CREDITS DEPARTMENT					
1964 .	..	..	..	..	..	130.9	..	..	130.9
1965 .	..	..	..	..	..	243.1	..	..	243.1
1966 .	..	..	..	..	..	174.7	..	..	174.7
1967 .	..	..	..	..	..	361.0	..	..	361.0
1968 .	..	..	..	..	..	229.6	..	..	229.6
				TOTAL(f)					
1964 .	1,412.3	199.6	12.7	675.0	5.5	159.1	15.1	29.6	2,509.0
1965 .	887.3	411.3	10.1	802.3	32.6	306.5	22.4	43.1	2,515.6
1966 .	986.5	306.1	24.0	688.5	15.7	252.4	29.1	33.5	2,335.8
1967 .	791.4	343.6	12.4	812.4	9.2	429.6	30.9	54.3	2,483.9
1968 .	664.8	333.5	9.5	1,037.2	8.0	300.1	33.8	75.3	2,462.2

(a) Includes currency at short call. (b) Includes Treasury bills and Treasury notes. (c) After deducting provision for debts considered bad or doubtful. (d) At cost, less amounts written off. (e) Note Issue Department funds held with Central Bank were increased by $50 million due mainly to changes in the form of investments following the devaluation of sterling. (f) Inter-departmental accounts have been offset.

Reserve Bank profits

RESERVE BANK OF AUSTRALIA: NET PROFITS, 1963-64 TO 1967-68

($ million)

Year	Central Banking Business	Note Issue Department	Rural Credits Department	Total	Distributed to—			
					Commonwealth of Australia	Reserve Bank Reserve fund	Rural Credits Department	
							Reserve fund	Development fund
1963–64 . .	10.0	27.0	1.0	37.9	32.0	5.0	0.5	0.5
1964–65 . .	15.3	30.5	1.0	46.8	41.0	4.8	0.5	0.5
1965–66 . .	8.7	31.1	1.2	41.0	35.8	4.0	0.6	0.6
1966–67 . .	7.9	34.3	1.3	43.6	38.8	3.5	0.7	0.7
1967–68 . .	4.4	23.0	1.5	29.0	26.2	1.3	0.7	0.7

Commonwealth Development Bank of Australia

The Commonwealth Development Bank of Australia was established by the *Commonwealth Banks Act* 1959 and commenced operations on 14 January 1960. It was formed basically from an amalgamation of the Mortgage Bank and Industrial Finance Departments of the Commonwealth Bank. Under the Act the Bank is authorised to provide assistance for the development of worthwhile enterprises in the fields of primary and secondary industries, which would otherwise be unable to obtain the necessary finance on reasonable and suitable terms and conditions. The Commonwealth Development Bank is managed by a General Manager under the Managing Director of the Commonwealth Banking Corporation, and its policy is determined by the Board of that Corporation. The capital of the Development Bank consists of the capital of the Mortgage Bank and Industrial Finance Departments of the Commonwealth Bank immediately prior to 14 January 1960, $10,000,000 provided by the Reserve Bank, $20,000,000 appropriated from the Consolidated Revenue Fund in 1961–62 by the *Commonwealth Banks Act* 1961 and the *Commonwealth Banks Act* 1962, $10,000,000 appropriated in 1963–64 by the *Commonwealth Banks Act* 1963, and such other sums as are provided from the Commonwealth Development Bank Reserve Fund. The net profits of the Bank are paid to the Commonwealth Development Bank Reserve Fund.

Liabilities and assets

COMMONWEALTH DEVELOPMENT BANK OF AUSTRALIA: LIABILITIES
30 JUNE 1964 TO 1968
($ million)

30 June—	*Capital*	*Reserve fund*	*Balances due to other banks*	*Deposits, bills payable, all other liabilities*	*Total*
1964	61.7	16.8	27.2	22.9	128.6
1965	61.7	19.0	45.0	25.1	150.8
1966	61.7	21.2	65.9	27.8	176.6
1967	61.7	23.2	91.3	30.0	206.1
1968	61.7	25.2	112.8	32.3	232.0

COMMONWEALTH DEVELOPMENT BANK OF AUSTRALIA: ASSETS
30 JUNE 1964 TO 1968
($ million)

30 June—	*Coin, bullion, notes and cash at bankers*	*Australian public securities (incl. Treasury bills)*	*Other securities*	*Loans to authorised dealers in short-term money market*	*Cheques and bills of other banks*	*Loans, advances, and bills discounted*	*All other assets*	*Total*
1964	0.6	3.0	0.4	..	0.9	123.4	0.4	128.6
1965	0.3	1.2	0.4	0.7	1.0	146.8	0.5	150.8
1966	0.5	1.2	0.3	0.4	1.1	172.6	0.6	176.6
1967	0.3	1.2	0.3	0.5	1.2	202.0	0.6	206.1
1968	0.5	1.2	0.3	0.4	1.4	227.5	0.8	232.0

Profit and loss

The profit and loss of the Commonwealth Development Bank for the years 1963–64 to 1967–68 is shown in the following table. The net profit was appropriated to the Commonwealth Development Bank Reserve Fund.

COMMONWEALTH DEVELOPMENT BANK OF AUSTRALIA PROFIT AND LOSS, 1963-64 TO 1967-68

($ million)

Year	*Discount and interest earned, etc.(a)*	*Expenses (b)*	*Taxes and payments in lieu of taxes*	*Net profit*
1963–64 . .	6.1	4.1	. .	1.9
1964–65 . .	7.2	5.0	0.1	2.1
1965–66 . .	8.7	6.5	0.1	2.2
1966–67 . .	10.7	8.7	0.1	2.0
1967–68 . .	12.2	10.0	0.1	2.1

(*a*) Discount and interest earned, net exchange commissions and other items (including transfers from contingencies accounts)—after deducting interest paid and accrued on deposits, rebate on bills current at balance date, amounts written off assets, and losses on realisation of assets and transfers to the credit of contingencies accounts (out of which accounts provision for all bad and doubtful debts has been made). (*b*) Includes proportion of expenses of Commonwealth Banking Corporation attributable to the Development Bank.

Cheque-paying banks

Banks transacting business in Australia

At 30 June 1968 the fifteen banks operating in Australia transacted all classes of banking business at 4,670 branches and 1,624 agencies. The major trading banks have branches throughout Australia. The Rural Bank of New South Wales, the State Bank of South Australia, and The Rural and Industries Bank of Western Australia, being State Government banks, have branches only in their respective States. The Brisbane Permanent Building and Banking Co. Ltd transacts business only in Brisbane. The remaining three banks are branches of overseas banks.

CHEQUE-PAYING BANKS: NUMBER OF BRANCHES(*a*) STATES AND TERRITORIES, 30 JUNE 1968

Banks	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Major trading banks . .	1,586	1,215	697	403	357	106	13	36	4,413
Other cheque-paying banks .	163	2	2	35	55	. .	. .	. .	257
All cheque-paying banks—									
Metropolitan area . .	814	694	228	211	199	27	4	29	2,206
Elsewhere . . .	935	523	471	227	213	79	9	7	2.464
Total . . .	**1,749**	**1,217**	**699**	**438**	**412**	**106**	**13**	**36**	**4,670**

(*a*) Includes head offices. Excludes 1,624 agencies.

Australian cheque-paying banks—balance sheets

Liabilities and assets of individual Australian cheque-paying banks at balance dates in 1968 (and corresponding totals for these banks in 1967) are shown in the following tables. The information for the Major Trading Banks and The Brisbane Permanent Building and Banking Co. Ltd has been obtained from the annual returns lodged with the Commonwealth Statistician under Section 52 of the *Banking Act* 1959–1967, whereas that for the other banks has been compiled from information published in their annual reports.

AUSTRALIAN CHEQUE-PAYING BANKS: LIABILITIES(*a*), 1967 AND 1968

($'000)

Bank	*Paid-up capital*	*Reserve funds (used in business of bank)*	*Final dividend proposed*	*Balance of profit and loss account*	*Total shareholders' funds or total capital and reserve funds*	*Balances due to other banks*	*Deposits, bills payable and other liabilities (b)*	*Total*
1968—								
Major Trading Banks—								
Commonwealth Trading Bank of Australia	(*c*)14,858	15,186	..	..	30,044	8,038	1,351,575	1,389,657
Australia and New Zealand Bank Ltd	33,132	27,828	2,319	4,691	67,970	141,842	1,354,207	1,564,019
The Bank of Adelaide	5,600	5,800	280	693	12,373	2,645	98,425	113,443
Bank of New South Wales	52,680	47,890	3,161	4,763	108,494	28,828	1,814,698	1,952,020
The Commercial Bank of Australia Ltd	20,166	17,980	823	1,016	39,985	16,899	661,315	718,198
The Commercial Banking Co. of Sydney Ltd	19,125	16,728	1,148	2,127	39,127	12 236	608,612	659,975
The English, Scottish and Australian Bank Ltd	18,072	11,295	1,084	784	31,235	10,145	517,197	558,577
The National Bank of Australasia Ltd	25,223	22,000	1,513	1,422	50,158	7,513	1,034,988	1,092,659
Total, Major Trading Banks	*188,855*	*164,707*	*10,328*	*15,496*	*379,386*	*228,146*	*7,441,016*	*8,048,548*
Other banks—								
The Brisbane Permanent Building and Banking Co. Ltd	2,500	1,125	100	141	3,866	..	9,284	13,149
The Rural Bank of New South Wales (General Bank Department)	(*d*)18,133	(*e*)41,148	..	..	59,281	1,448	305,233	365,962
State Bank of South Australia	(*f*)13,854	7,640	..	..	21,494	..	(*g*)124,705	146,199
The Rural and Industries Bank of Western Australia (Rural Department)	(*h*)22,230	3,179	..	..	25,408	..	(*i*)120,805	146,213
Total, other banks	*56,717*	*53,091*	*100*	*141*	*110,048*	*1,448*	*560,027*	*671,523*
Total, all banks 1968	245,572	217,798	10,428	15,636	489,434	229,594	8,001,043	8,720,071
Total, all banks 1967	246,102	201,017	9,852	15,553	472,524	221,281	7,459,260	8,153,065

(*a*) For dates of balance-sheets *see* table on page 627. (*b*) Includes provision for contingencies. (*c*) Amount specified as capital in the *Commonwealth Banks Act* 1959. (*d*) Inscribed stock and debentures issued for capital purposes. (*e*) Includes special reserve built up from share of profits of the Commonwealth Savings Bank in New South Wales. (*f*) Capital provided by State Government of South Australia. (*g*) Includes $74,965,641 of advances by State Treasurer to Home Builders' Fund. (*h*) Capital provided by State Government of Western Australia. The Sinking Fund established for redemption of capital has been deducted. (*i*) Includes Savings Bank deposits, $50,826,686.

AUSTRALIAN CHEQUE-PAYING BANKS: ASSETS(*a*), 1967 AND 1968

($'000)

Bank	Coin, bullion, notes and cash at Reserve Bank	Money at short call overseas	Australian public securities			Other public securities	Other securities	Loans to authorised dealers in short-term money market
			Commonwealth Government		Local and semi-govt. authorities			
			Treasury bills and notes	Other securities				
1968—								
Major Trading Banks—								
Commonwealth Trading Bank of Australia	31,237	8,786	8,728	257,613	15,081	1,134	6,259	12,265
Australia and New Zealand Bank Ltd	35,052	1,614	14,481	134,547	..	32,124	9,988	22,130
The Bank of Adelaide	4,669	903	600	12,624	..	..	5,286	3,100
Bank of New South Wales	48.331	11,454	17,544	303,030	..	7,961	34,271	11,650
The Commercial Bank of Australia Ltd	20,227	5,807	450	82,918	807	2,764	15,733	17,500
The Commercial Banking Co. of Sydney Ltd	12,925	2,411	3,098	91,331	..	..	12,278	13,775
The English, Scottish and Australian Bank Ltd	16,333	..	2,990	70,605	..	1,001	10,830	14,195
The National Bank of Australasia Ltd	23,715	2,004	9,049	155,597	..	..	10,260	8,400
Total, Major Trading Banks	*192,489*	*32,978*	*56,941*	*1,108,266*	*15,888*	*44,984*	*104,904*	*103,015*
Other banks—								
The Brisbane Permanent Building and Banking Co. Ltd	179	..	..	1,366	13	..	715	100
The Rural Bank of New South Wales (General Bank Department)	6,125	..	..	67,767	1,308	..	..	17,835
State Bank of South Australia	1,526	..	..	7,527	..	..	10,250	..
The Rural and Industries Bank of Western Australia (Rural Department)(*d*)	(*e*)6,274	..	10,804	45,128	20,017	..	..	..
Total, other banks	*14,104*	..	*10,804*	*121,788*	*21,338*	..	*10,965*	*17,935*
Total, all banks, 1968	206,593	32,978	67,745	1,230,054	37,226	44,984	115,869	120,950
Total, all banks, 1967	203,771	63,481	49,313	1,263,084	32,364	52,200	92,784	101,954

For footnotes *see* next page.

AUSTRALIAN CHEQUE-PAYING BANKS: ASSETS(a), 1967 AND 1968—*continued*

($'000)

Bank	*Statutory reserve deposit account with Reserve Bank*	*Cheques and bills of, and balances with and due from other banks*	*Loans(b), advances and bills discounted*	*Bank premises, furniture and sites*	*Bills receivable and remittances in transit*	*All other assets*	*Total*
1968—							
Major Trading Banks—							
Commonwealth Trading Bank of Australia . . .	88,762	31,229	667,197	12,180	235,995	13,191	1,389,657
Australia and New Zealand Bank Ltd . . .	63,851	124,473	772,702	26,816	323,917	2,324	1,564,019
The Bank of Adelaide . .	6,648	10,115	57,834	4,638	5,063	1,964	113,443
Bank of New South Wales .	110,659	142,701	1,006,476	29,600	222,489	5,855	1,952,020
The Commercial Bank of Australia Ltd . . .	41,796	31,279	421,178	18,531	56,483	2,725	718,198
The Commercial Banking Co. of Sydney Ltd . . .	42,782	28,801	352,208	15,560	72,471	12,336	659,975
The English, Scottish and Australian Bank Ltd .	35,894	31,150	285,734	14,248	69,952	5,644	558,577
The National Bank of Australasia Ltd . . .	64,065	42,204	541,338	23,814	165,718	46,496	1,092,659
Total, major trading banks	*454,457*	*441,952*	*4,104,667*	*145,386*	*1,152,086*	*90,535*	*8,048,548*
Other banks—							
The Brisbane Permanent Building and Banking Co. Ltd	154	930	9,520	142	..	29	13,149
The Rural Bank of New South Wales (General Bank Department) . . .	..	12,735	228,834	13,673	13,549	4,136	365,962
State Bank of South Australia	..	828	(c)118,525	1,499	3,367	2,677	146,199
The Rural and Industries Bank of Western Australia (Rural Department)(d) .	..	(f)	53,664	5,184	5,142	..	146,213
Total, other banks .	*154*	*14,494*	*410,543*	*20,498*	*22,058*	*6,842*	*671,523*
Total, all banks, 1968 .	**454,611**	**456,446**	**4,515,210**	**165,884**	**1,174,144**	**97,377**	**8,720,071**
Total, all banks, 1967 .	472,448	401,621	4,025,833	165,870	1,140,620	87,721	8,153,065

(a) For dates of balance-sheets *see* table on page 649. (b) Other than loans to authorised dealers in the short-term money market. (c) Includes $74,889,425 advances under extended terms—Home Builders' Fund. (d) Includes assets held against Savings Bank deposits of $50,826,686. (e) Includes accounts with State Treasury. (f) Included with Coin, bullion, notes and cash at Reserve Bank.

Australian cheque-paying banks—profit and loss accounts

AUSTRALIAN CHEQUE-PAYING BANKS: PROFIT AND LOSS, 1967 AND 1968
($'000)

Bank	*Year ended*	*Net earnings (a)*	*Expenses (b)*	*Income, land and other taxes and payments in lieu of taxes*	*Net profit*
1968—					
Major Trading Banks—					
Commonwealth Trading Bank of Australia	30.6.68	51,692	43,962	3,834	3,896
Australia and New Zealand Bank Ltd	30.9.68	65,912	50,081	7,779	8,052
The Bank of Adelaide	30.9.68	6,259	5,013	442	804
Bank of New South Wales	30.9.68	84,204	60,846	11,233	12,126
The Commercial Bank of Australia Ltd	30.6.68	28,864	23,734	2,836	2,294
The Commercial Banking Co. of Sydney Ltd	30.6.68	26,452	20,527	2,431	3,494
The English, Scottish and Australian Bank Ltd	30.6.68	30,741	24,630	3,409	2,702
The National Bank of Australasia Ltd	30.9.68	42,340	32,185	5,401	4,755
Total, Major Trading Banks		*336,465*	*260,977*	*37,365*	*38,123*
Other banks—					
The Brisbane Permanent Building and Banking Co. Ltd	31.8.68	726	262	217	247
The Rural Bank of New South Wales (General Bank Department)	30.6.68	12,343	11,268	n.a.	1,075
State Bank of South Australia	30.6.68	(g)7,059	6,236	n.a.	822
The Rural and Industries Bank of Western Australia (Rural Department)(*h*)	31.3.68	(g)8,713	8,116	n.a.	597
Total other banks		*28,840*	*25,882*	*217*	*2,741*
Total, all banks, 1968		**365,305**	**286,859**	**37,582**	**40,864**
Total, all banks, 1967		334,684	273,578	28,549	32,557

For footnotes *see* next page.

AUSTRALIAN CHEQUE-PAYING BANKS: APPROPRIATION OF PROFITS 1967 AND 1968

($'000)

Bank	Reserve funds (c)	Writing-off bank premises	Other appropriations	Dividends(d)	
				Paid and proposed	Rate per annum (per cent)
1968—					
Major Trading Banks—					
Commonwealth Trading Bank of Australia	1,716	464	(e)1,716	..	..
Australia and New Zealand Bank Ltd	3,765	..	..	3,976	12
The Bank of Adelaide	150	..	..	560	10
Bank of New South Wales	3,000	1,632	..	5,795	10
The Commercial Bank of Australia Ltd	500	200	..	1,579	(f)
The Commercial Banking Co. of Sydney Ltd	900	200	..	1,998	11
The English, Scottish and Australian Bank Ltd	2,151	..	..	1,807	10
The National Bank of Australasia Ltd	2,000	..	..	2,774	11
Total, Major Trading Banks	*14,182*	*2,496*	*1,716*	*18,489*	..
Other banks—					
The Brisbane Permanent Building and Banking Co. Ltd	50	..	..	200	8
The Rural Bank of New South Wales (General Bank Department)	1,075	..	..	..	..
State Bank of South Australia	822	..	..	..	..
The Rural and Industries Bank of Western Australia (Rural Department)(h)	597	..	..	..	..
Total, other banks	*2,544*	..	..	*200*	..
Total, all banks, 1968	**16,726**	**2,496**	**1,716**	**18,688**	..
Total, all banks, 1967	**8,844**	**2,032**	**1,175**	**20,476**	..

(a) Discount and interest earned, net exchange, commissions and other items (including transfers from contingencies accounts) after deducting interest paid and accrued on deposits, rebate on bills current at balance date, amounts written off assets and losses on realisation of assets, and transfers to the credit of contingencies accounts (out of which accounts provision for all bad and doubtful debts has been made). (b) Includes directors' fees. (c) Excludes accumulated profits and profit and loss accounts. (d) Dividends paid or payable out of profits earned during the year. (e) Commonwealth of Australia. (f) Four per cent on Preference shares, ten per cent on Ordinary shares, and two and a half per cent on New Ordinary Stock Units. (g) Earnings represent gross earnings; expenses include interest paid, management expenses and provisions for contingencies. (h) Includes profit and loss on account of Savings Bank business.

All cheque-paying banks—average liabilities and assets within Australia

Particulars of the average liabilities and assets *within Australia* for all cheque-paying banks in Australia for the months of June 1968 and earlier years are shown in the following tables. The details in these tables relate only to liabilities and assets within Australia and include the overseas banks, the Bank of China, Bank of New Zealand, and Banque Nationale de Paris. The tables on pages 624–6, Australian cheque-paying banks, relate to liabilities and assets both inside and outside Australia and exclude the overseas banks.

ALL CHEQUE-PAYING BANKS: AVERAGE LIABILITIES WITHIN AUSTRALIA(*a*)
MONTH OF JUNE 1968
($'000)

Bank	*Deposits repayable in Australia*				*Balances due to other banks*	*Bills payable and all other liabilities to the public*	*Total*
		Current					
	Fixed	*Bearing interest*	*Not bearing interest*	*Total*			
Major Trading Banks—							
Commonwealth Trading Bank of Australia	521,976	62,878	537,578	1,122,432	4,536	18,579	1,145,547
Australia and New Zealand Bank Ltd .	304,960	35,511	454,500	794,971	12,629	22,755	830,355
The Bank of Adelaide . . .	32,350	5,302	48,330	85,982	2,361	1,482	89,824
Bank of New South Wales . .	533,768	107,115	738,634	1,379,517	2,973	23,855	1,406,345
The Commercial Bank of Australia Ltd	206,861	26,725	287,772	521,358	2,948	8,217	532,523
The Commercial Banking Co. of Sydney Ltd	217,135	41,250	273,725	532,110	4,394	20,742	557,245
The English, Scottish and Australian Bank Ltd	162,067	29,633	258,440	450,140	3,396	21,840	475,375
The National Bank of Australasia Ltd	322,691	69,925	418,819	811,435	8,310	29,644	849,389
Total, Major Trading Banks . .	*2,301,808*	*378,337*	*3,017,797*	*5,697,942*	*41,546*	*147,113*	*5,886,601*
Other banks—							
Bank of China	17	. .	190	207	. .	2	208
Bank of New Zealand . . .	2,505	317	7,312	10,134	183	333	10,649
The Brisbane Permanent Building and Banking Co. Ltd	1,316	6,202	. .	7,518	351	679	8,547
Banque Nationale de Paris . .	4,004	576	4,455	9,035	3,687	334	13,055
The Rural Bank of New South Wales (General Bank Department) . .	118,386	56,397	88,221	263,004	7,575	20,213	290,792
State Bank of South Australia . .	22,119	2,021	21,854	45,994	83	88,739	134,815
The Rural and Industries Bank of Western Australia (Rural Department)	22,708	4,710	25,638	53,056	772	27,135	80,963
Total, other banks	*171,055*	*70,223*	*147,669*	*388,946*	*12,649*	*137,433*	*539,028*
Total, all banks	**2,472,863**	**448,560**	**3,165,466**	**6,086,888**	**54,195**	**284,546**	**6,425,629**

(*a*) Includes Papua and New Guinea.

ALL CHEQUE-PAYING BANKS: AVERAGE ASSETS WITHIN AUSTRALIA(*a*) MONTH OF JUNE 1968

($'000)

Bank	*Coin, bullion, notes and cash at Reserve Bank*	*Commonwealth Government Securities*		*Loans to authorised dealers in short-term money market*	*Statutory Reserve Deposit Account with Reserve Bank*	*Loans(b), advances and bills discounted*	*All other assets (c)*	*Total*
		Treasury bills and notes	*Other securities*					
Major Trading Banks—								
Commonwealth Trading Bank of Australia	30,242	5,070	260,613	14,081	88,959	648,728	75,814	1,123,505
Australia and New Zealand Bank Ltd	23,169	9,367	117,646	15,636	63,606	511,219	74,205	814,846
The Bank of Adelaide	3,827	..	12,506	50	7,026	58,236	19,732	101,376
Bank of New South Wales	30,333	1,670	291,639	15,294	110,970	890,485	120,389	1,460,780
The Commercial Bank of Australia Ltd	14,863	450	80,781	8,125	42,019	339,964	52,318	538,518
The Commercial Banking Co. of Sydney Ltd	14,315	1,281	91,766	5,500	42,875	347,189	62,638	565,564
The English, Scottish and Australian Bank Ltd	14,081	348	72,668	2,783	36,004	282,522	53,307	461,711
The National Bank of Australasia Ltd	19,620	6,874	144,149	12,520	65,043	519,332	90,579	858,117
Total, Major Trading Banks	*150,449*	*25,059*	*1,071,768*	*73,988*	*456,501*	*3,597,673*	*548,980*	*5,924,416*
Other banks—								
Bank of China	148	..	..	138	46	42	32	405
Bank of New Zealand	103	1,021	1,374	711	704	7,656	4,426	15,995
The Brisbane Permanent Building and Banking Co. Ltd	62	..	1,349	..	152	9,171	1,901	12,634
Banque Nationale de Paris	289	..	1,100	1,138	373	10,039	2,216	15,155
The Rural Bank of New South Wales (General Bank Department)	7,339	..	73,535	9,464	..	232,022	18,524	340,884
State Bank of South Australia	1,562	..	7,528	..	..	118,367	15,920	143,376
The Rural and Industries Bank of Western Australia (Rural Department)	1,479	1,385	31,836	2,300	..	44,857	8,885	90,742
Total, other banks	*10,981*	*2,406*	*116,722*	*13,750*	*1,274*	*422,154*	*51,903*	*619,191*
Total, all banks	**161,431**	**27,465**	**1,188,489**	**87,738**	**457,774**	**4,019,827**	**600,880**	**6,543,608**

(*a*) Includes Papua and New Guinea. (*b*) Excludes loans to authorised dealers in the short-term money market. (*c*) Includes local government and semi-governmental securities.

ALL CHEQUE-PAYING BANKS: AVERAGE LIABILITIES WITHIN AUSTRALIA(*a*)
JUNE 1964 TO 1968

($ million)

June—	*Deposits repayable in Australia*				*Balances due to other banks*	*Bills payable and all other liabilities to the public*	*Total*
		Current					
	Fixed	*Bearing interest*	*Not bearing interest*	*Total*			
Major Trading Banks—							
1964	1,499.1	260.2	2,618.9	4,378.2	23.1	85.1	4,486.4
1965	1,791.1	304.2	2,651.2	4,746.4	34.6	124.0	4,904.9
1966	2,002.6	316.7	2,673.2	4,992.4	25.8	139.2	5,157.4
1967	2,129.1	321.2	2,814.5	5,264.8	30.3	129.5	5,424.5
1968	2,301.8	378.3	3,017.8	5,697.9	41.5	147.1	5,886.6
All cheque-paying banks—							
1964	1,604.8	305.3	2,739.2	4,649.3	26.7	180.5	4,856.5
1965	1,909.7	353.0	2,775.7	5,038.4	39.4	229.6	5,307.4
1966	2,136.0	370.9	2,801.5	5,308.4	35.0	253.9	5,597.3
1967	2,274.8	378.9	2,960.0	5,613.7	39.6	256.1	5,909.4
1968	2,472.9	448.6	3,165.5	6,086.9	54.2	284.5	6,425.6

(*a*) Includes Papua and New Guinea.

ALL CHEQUE-PAYING BANKS: AVERAGE ASSETS WITHIN AUSTRALIA(*a*)
JUNE 1964 TO 1968

($ million)

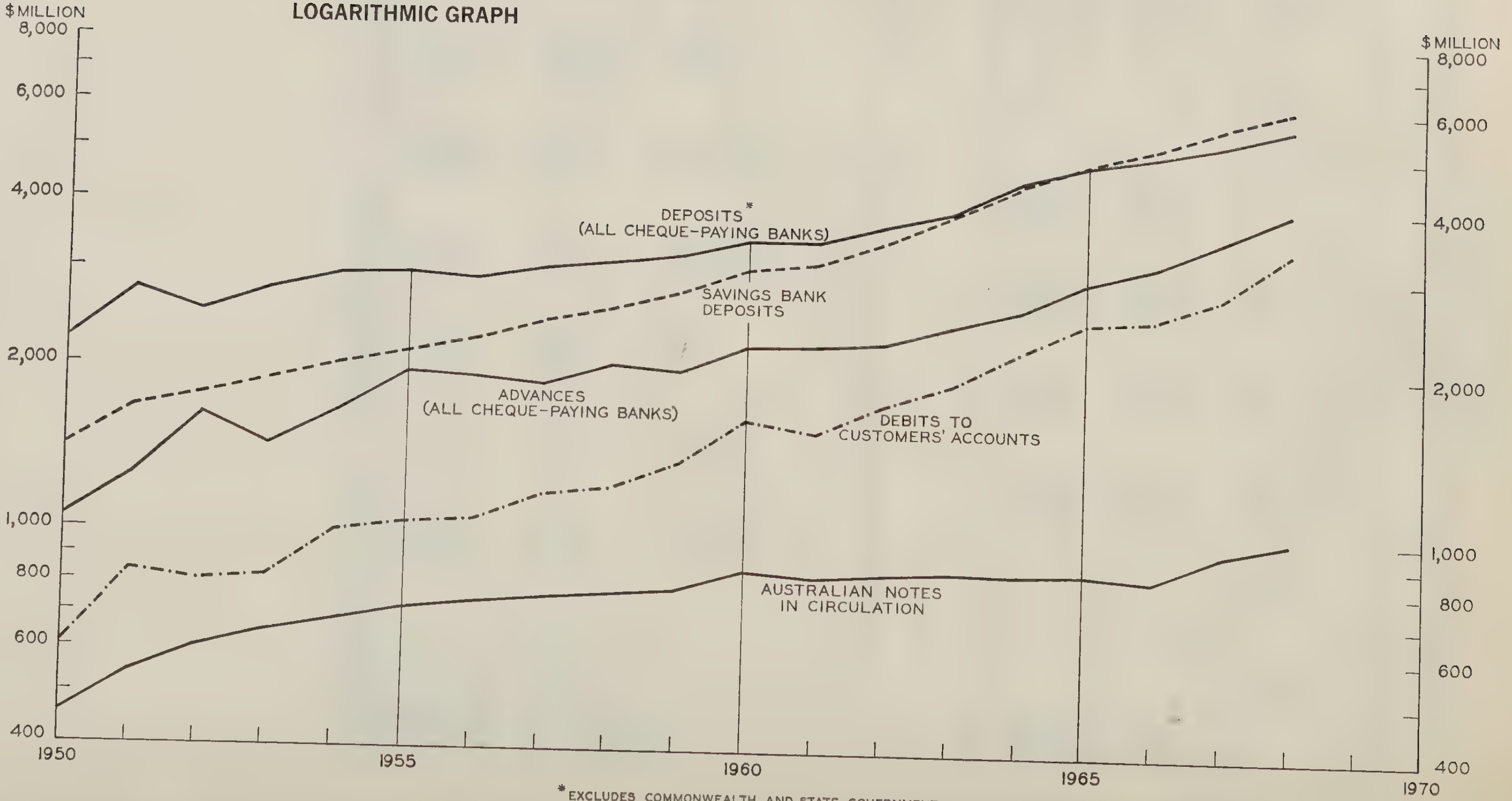
June—	*Coin, bullion, notes and cash at Reserve Bank*	*Commonwealth Government securities*		*Loans to authorised dealers in short-term money market*	*Statutory Reserve Deposit Account with Reserve Bank*	*Loans(b), advances and bills discounted*	*All other assets (c)*	*Total*
		Treasury bills and notes	*Other securities*					
Major Trading Banks—								
1964 . .	136.1	50.4	865.3	56.6	677.7	2,333.2	347.9	4,467.2
1965 . .	159.9	20.6	871.2	77.4	656.1	2,631.1	410.9	4,827.1
1966 . .	150.2	38.5	1,019.0	61.0	472.6	2,844.6	504.2	5,090.1
1967 . .	160.0	24.1	1,065.8	73.5	474.0	3,180.9	493.2	5,471.5
1968 . .	150.4	25.1	1,071.8	74.0	456.5	3,597.7	549.0	5,924.4
All cheque-paying banks—								
1964 . .	144.0	53.4	959.1	67.3	678.8	2,609.9	383.6	4,896.0
1965 . .	168.4	22.2	952.0	93.7	657.2	2,955.1	447.9	5,296.5
1966 . .	162.8	40.0	1,116.6	74.8	473.5	3,182.8	548.4	5,598.9
1967 . .	172.3	24.6	1,187.0	88.8	475.2	3,547.8	535.1	6,030.8
1968 . .	161.4	27.5	1,188.5	87.7	457.8	4,019.8	600.9	6,543.6

(*a*) Includes Papua and New Guinea. (*b*) Excludes loans to authorised dealers in the short-term money market. (*c*) Includes local government and semi-governmental securities.

PLATE 36

BANKING: AUSTRALIA

1950 TO 1968



*EXCLUDES COMMONWEALTH AND STATE GOVERNMENTS

All cheque-paying banks—ratios of assets and liabilities to total deposits

The following tables show, for the Major Trading Banks and for all cheque-paying banks, the ratios of selected assets and liabilities to total deposits for the months of June 1964 to 1968. *The ratios are based on the average liabilities and assets for the month of June in the years shown.*

ALL CHEQUE-PAYING BANKS: RATIOS OF SELECTED ASSETS AND LIABILITIES TO TOTAL DEPOSITS(*a*), JUNE 1964 TO 1968

(Per cent)

June—	*Coin, bullion, notes and cash at Reserve Bank*	*Commonwealth and State Government securities*		*Statutory Reserve Deposit Account with Reserve Bank*	*Loans(b), advances and bills discounted*	*Deposits not bearing interest*
		Treasury bills and notes	*Other*			
Major Trading Banks—						
1964 . . .	3.1	1.2	19.8	15.5	53.3	59.8
1965 . . .	3.4	0.4	18.4	13.8	55.4	55.9
1966 . . .	3.0	0.8	20.4	9.5	57.0	53.5
1967 . . .	3.0	0.5	20.2	9.0	60.4	53.5
1968 . . .	2.6	0.4	18.8	8.0	63.1	53.0
All cheque-paying banks—						
1964 . . .	3.1	1.2	20.6	14.6	56.1	58.9
1965 . . .	3.0	0.4	18.9	13.0	58.7	55.1
1966 . . .	3.1	0.8	21.0	8.9	60.0	52.8
1967 . . .	3.1	0.4	21.1	8.5	63.2	52.7
1968 . . .	2.7	0.5	19.5	7.5	66.1	52.0

(*a*) Based on deposits and assets within Australia (including Papua and New Guinea). (*b*) Excludes loans to authorised dealers in short-term money market.

ALL CHEQUE-PAYING BANKS: PROPORTION OF NON-INTEREST BEARING DEPOSITS TO TOTAL DEPOSITS, STATES AND TERRITORIES JUNE 1964 TO 1968

(Per cent)

June—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.(a)*
Major Trading Banks—									
1964 . .	60.5	58.6	60.7	56.7	59.6	65.2	64.2	68.2	59.8
1965 . .	56.6	54.3	56.7	53.2	57.0	61.5	63.2	65.9	55.9
1966 . .	54.2	51.7	53.5	52.5	55.9	60.1	60.8	63.2	53.5
1967 . .	53.9	51.5	54.3	51.5	57.8	57.1	60.4	64.5	53.5
1968 . .	53.0	51.2	53.6	50.6	59.1	56.1	62.7	63.1	52.9
All cheque-paying banks—									
1964 . .	58.3	58.7	60.0	56.8	60.7	65.2	64.2	68.2	58.9
1965 . .	54.8	54.3	56.2	53.4	57.3	61.5	63.2	65.9	55.1
1966 . .	52.4	51.7	53.0	52.8	55.7	60.1	60.8	63.2	52.8
1967 . .	52.2	51.7	54.3	57.4	56.9	57.1	60.4	64.5	52.7
1968 . .	51.0	51.2	53.0	50.2	57.7	56.1	62.7	63.1	52.0

(*a*) Includes Papua and New Guinea.

ALL CHEQUE-PAYING BANKS: RATIO OF ADVANCES TO TOTAL DEPOSITS STATES AND TERRITORIES, JUNE 1964 TO 1968

(Per cent)

June—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.(a)*
Major Trading Banks—									
1964 . .	57.6	47.4	54.9	47.4	64.1	58.0	35.1	31.0	53.3
1965 . .	58.6	49.1	59.8	52.1	64.8	55.5	35.7	52.8	55.4
1966 . .	61.8	52.0	59.5	55.2	55.6	51.0	35.0	30.3	57.0
1967 . .	65.7	55.3	59.2	58.6	63.9	55.3	32.5	38.5	60.4
1968 . .	67.5	58.9	61.7	66.2	62.8	61.4	37.6	37.1	63.1
All cheque-paying banks—									
1964 . .	60.3	47.4	55.7	62.5	70.5	58.0	35.1	31.0	56.1
1965 . .	61.8	49.3	60.4	70.1	70.6	55.5	35.7	52.8	58.7
1966 . .	64.3	52.2	60.1	75.0	59.7	51.0	35.0	30.3	60.0
1967 . .	67.5	55.4	59.8	81.1	67.2	55.3	32.5	38.5	63.2
1968 . .	69.9	59.1	62.0	88.8	65.6	61.4	37.6	37.1	66.1

(*a*) Includes Papua and New Guinea.

Major Trading Banks—classification of bank advances within Australia

Classification of bank advances of the Major Trading Banks outstanding for each State at 8 January 1969 and for Australia at July 1966 to 1968 and January 1969 are shown in the following tables.

Resident borrowers cover institutions (including branches of overseas institutions) engaged in business in Australia and persons permanently residing in Australia. Non-resident borrowers cover all other persons and institutions incorporated abroad, which, though represented, do not carry on business in Australia.

Advances to resident borrowers have been classified as business advances, advances to public authorities, personal advances, and advances to non-profit organisations.

Business advances have been further classified to the main industry of the borrower and include advances to partnerships, companies and other institutions engaged in business in Australia, advances to persons actively engaged in business on their own behalf if the advance is mainly for business purposes, advances to mutual, co-operative and benefit societies which distribute their profits or surpluses (if any) to members by way of dividends, rebates on charges for goods and services, or increased benefits.

Advances to public authorities cover advances to local and semi-governmental authorities including separately constituted government business undertakings but not the Commonwealth or State Governments. Personal advances cover advances to persons for purposes other than carrying on a business. Advances to non-profit organisations cover advances to organisations which are not carried on for the purpose of making a profit or gain to individual members, any income of the organisation being used for the purposes of the organisation or for the benefit of the community.

MAJOR TRADING BANKS: CLASSIFICATION OF ADVANCES WITHIN AUSTRALIA(*a*), STATES, 8 JANUARY 1969

Classification	*N.S.W.* (*b*) *$ m*	*Vic* *$ m*	*Qld* (*a*) *$ m*	*S.A.* (*c*) *$ m*	*W.A.* *$ m*	*Tas.* *$ m*	*Aust.* (*a*) *$ m*	*Proportion of total (per cent)*	*Term loan component* *$ m*
RESIDENT BORROWERS									
Business advances classified according to main industry of borrower—									
Agriculture, grazing and dairying	351.7	203.4	182.4	82.5	75.1	21.0	916.3	24.8	121.0
Manufacturing	268.4	209.0	67.4	40.7	20.3	8.9	614.7	16.6	111.1
Transport, storage and communication	24.2	19.5	8.5	3.2	4.0	1.6	61.0	1.6	12.2
Finance—									
Building and housing societies	18.9	15.7	1.8	0.9	0.5	0.3	38.1	1.1	0.2
Other	52.7	41.8	9.6	9.9	4.1	4.8	122.9	3.3	1.9
Total, finance	71.7	57.5	11.4	10.7	4.6	5.1	161.0	4.4	2.1
Commerce—									
Retail trade	107.8	75.3	45.8	22.7	16.8	7.5	275.9	7.5	7.4
Wholesale trade(*d*)	178.1	99.0	15.8	22.7	26.9	6.4	348.9	9.4	9.8
Total, commerce	285.9	174.3	61.6	45.4	43.7	13.9	624.8	16.9	17.2
Building and construction	53.1	34.8	15.3	6.8	8.6	3.1	121.7	3.3	9.2
Other businesses	187.3	95.7	62.4	19.1	24.4	5.0	394.0	10.6	67.7
Unclassified	11.1	9.6	2.8	3.3	2.1	0.5	29.4	0.8	1.5
Total, business advances—									
Companies(*e*)	784.2	491.0	147.2	110.9	79.4	29.7	1,642.4	44.4	231.4
Other(*e*)	469.2	312.9	264.6	100.9	103.4	29.5	1,280.4	34.6	110.6
Total	1,253.4	803.9	411.8	211.7	182.8	59.2	2,922.8	79.0	342.0
Advances to public authorities(*f*)	13.8	36.7	3.1	1.1	0.8	0.2	55.7	1.5	1.5
Personal advances—									
Building or purchasing own home (individuals)	144.8	63.5	38.3	16.0	20.2	4.3	287.0	7.7	0.1
Other (including personal loans)	155.0	101.5	50.9	21.9	23.7	7.2	360.2	9.8	0.1
Total, personal	299.8	165.0	89.2	37.9	43.8	11.5	647.2	17.5	0.2
Advances to non-profit organisations	32.8	18.2	10.2	3.3	5.1	1.0	70.6	1.9	1.4
Total, advances to resident borrowers	*1,599.8*	*1,023.8*	*514.3*	*253.9*	*232.5*	*72.0*	*3,696.3*	*99.9*	*345.1*
NON-RESIDENT BORROWERS									
Advances to non-resident borrowers	*0.8*	*1.6*	*0.1*	..	*0.2*	..	*2.7*	*0.1*	..
TOTAL ADVANCES TO ALL BORROWERS									
Grand total	**1,600.6**	**1,025.4**	**514.3**	**253.9**	**232.7**	**72.0**	**3,699.0**	**100.0**	**345.1**

(*a*) Includes Papua and New Guinea. (*b*) Includes Australian Capital Territory. (*c*) Includes Northern Territory. (*d*) Includes temporary advances to woolbuyers. (*e*) The combined advances for these two groups are distributed over the industries above. (*f*) Includes local government and semi-governmental bodies.

MAJOR TRADING BANKS: CLASSIFICATION OF ADVANCES WITHIN AUSTRALIA(*a*) JULY 1966 TO JANUARY 1969

	At second Wednesday of—							
	July 1966		*July 1967*		*July 1968*		*January 1969*	
Classification	*Amount ($ m)*	*Per cent*	*Amount ($ m)*	*Per cent*	*Amount ($ m)*	*Per cent*	*Amount ($ m)*	*Per cent*
RESIDENT BORROWERS								
Business advances classified according to main industry of borrower—								
Agriculture, grazing and dairying . . .	650.4	22.2	750.5	23.1	918.1	25.0	916.3	24.8
Manufacturing . .	620.0	21.2	638.9	19.6	644.3	17.6	614.7	16.6
Transport, storage and communication . .	46.5	1.6	56.2	1.7	60.3	1.6	61.0	1.6
Finance—								
Building and housing societies . . .	41.1	1.4	39.7	1.2	39.6	1.1	38.1	1.1
Other . . .	96.0	3.3	96.0	3.0	137.2	3.7	122.9	3.3
Total, finance . .	137.1	4.7	135.8	4.2	176.8	4.8	161.0	4.4
Commerce—								
Retail trade . .	272.2	9.3	290.4	8.9	305.3	8.3	275.9	7.5
Wholesale trade(*b*) .	286.5	9.8	298.2	9.2	301.7	8.2	348.9	9.4
Total, commerce .	558.7	19.1	588.6	18.1	607.0	16.6	624.8	16.9
Building and construction	88.2	3.0	102.8	3.2	120.8	3.3	121.7	3.3
Other businesses . .	254.1	8.7	315.4	9.7	378.3	10.3	394.0	10.6
Unclassified . . .	25.3	0.9	32.4	1.0	29.2	0.8	29.4	0.8
Total, business advances—								
Companies(*c*) .	1,408.8	48.2	1,510.1	46.4	1,600.7	43.7	1,642.4	44.4
Other(*c*) . .	971.5	33.2	1,110.5	34.1	1,334.1	36.4	1,280.4	34.6
Total . .	2,380.3	81.4	2,620.6	80.5	2,934.8	80.0	2,922.8	79.0
Advances to public authorities(*d*) . . .	28.7	1.0	28.2	0.9	27.0	0.7	55.7	1.5
Personal advances classified according to main purpose of advance—								
Building or purchasing own home (individuals)	229.5	7.8	261.3	8.0	286.8	7.8	287.0	7.7
Other (including personal loans) . . .	231.0	7.9	280.3	8.6	349.0	9.5	360.2	9.8
Total, personal .	460.5	15.7	541.6	16.6	635.8	17.3	647.2	17.5
Advances to non-profit organisations . . .	55.2	1.9	62.2	1.9	67.2	1.8	70.6	1.9
Total, advances to resident borrowers .	*2,924.7*	*100.0*	*3,252.6*	*100.0*	*3,664.8*	*99.9*	*3,696.3*	*99.9*
NON-RESIDENT BORROWERS								
Advances to non-resident borrowers .	*1.0*	..	*1.4*	..	*2.1*	*0.1*	*2.7*	*0.1*
TOTAL ADVANCES TO ALL BORROWERS								
Grand total . .	2,925.7	100.0	3,254.0	100.0	3,666.9	100.0	3,699.0	100.0

(*a*) Includes Papua and New Guinea. (*b*) Includes temporary advances to woolbuyers. (*c*) The combined advances for these two groups are distributed over the industries above. (*d*) Includes local government and semi-governmental bodies.

Major Trading Banks—classification of bank deposits within Australia

A classification of bank deposits (excluding deposits of Commonwealth and State Governments) of the Major Trading Banks for July 1966 to 1968 and January 1969 is given in the following table. The classification is similar to that used for advances (*see* page 634).

MAJOR TRADING BANKS: CLASSIFICATION OF DEPOSITS(*a*) WITHIN AUSTRALIA(*b*) JULY 1966 TO JANUARY 1969

	At second Wednesday of—							
	July 1966		*July 1967*		*July 1968*		*January 1969*	
Classification	*Amount ($ m)*	*Per cent*	*Amount ($ m)*	*Per cent*	*Amount ($ m)*	*Per cent*	*Amount ($ m)*	*Per cent*
RESIDENT DEPOSITORS								
Business deposits classified according to main industry of depositor—								
Agriculture, grazing and dairying	801.2	16.9	833.4	16.5	763.8	14.1	854.1	14.3
Manufacturing	284.1	6.0	311.1	6.2	321.0	5.9	405.8	6.8
Transport, storage and communication	77.5	1.6	78.6	1.6	85.5	1.6	91.2	1.5
Finance	339.9	7.2	353.4	7.0	386.1	7.1	457.6	7.7
Commerce	382.1	8.1	397.2	7.9	399.3	7.3	479.8	8.0
Building and construction	148.8	3.1	158.3	3.1	166.5	3.1	191.7	3.2
Other businesses	548.8	11.6	576.6	11.4	681.4	12.5	718.9	12.1
Unclassified	62.5	1.3	54.5	1.1	58.4	1.1	71.1	1.2
Total, business deposits—								
Companies(*c*)	1,074.4	22.6	1,127.8	22.4	1,194.8	22.0	1,421.7	23.8
Other(*c*)	1,570.6	33.1	1,635.3	32.4	1,667.3	30.7	1,848.3	31.0
Total	2,645.0	55.7	2,763.1	54.8	2,862.0	52.7	3,270.1	54.8
Deposits of public authorities	242.0	5.1	264.9	5.3	305.8	5.6	298.2	5.0
Personal deposits	1,611.0	33.9	1,729.7	34.3	1,906.3	35.1	2,028.3	34.0
Deposits of non-profit organisations	201.4	4.2	229.1	4.5	259.0	4.8	266.0	4.5
Total, resident depositors	*4,699.4*	*99.0*	*4,986.7*	*98.9*	*5,333.1*	*98.2*	*5,862.6*	*98.3*
NON-RESIDENT DEPOSITORS								
Total, non-resident depositors	*47.9*	*1.0*	*57.7*	*1.1*	*100.1*	*1.8*	*99.7*	*1.7*
TOTAL—ALL DEPOSITORS								
Grand total	**4,747.4**	**100.0**	**5,044.4**	**100.0**	**5,433.2**	**100.0**	**5,962.3**	**100.0**

(*a*) Excludes deposits of Commonwealth and State Governments. (*b*) Includes Papua and New Guinea. (*c*) The combined deposits of these two groups are distributed over the industries above.

Major Trading Banks—new and increased lending commitments and overdraft limits

Particulars of new and increased lending commitments and overdraft limits of the Major Trading Banks are shown on page 638. The figures represent gross new lending commitments of banks and do not take account of cancellations and reductions of existing limits. Figures for cancellations and reductions of existing limits can be obtained from this series (after deducting term loan component and adjusting the weekly averages to a monthly basis) in conjunction with that of overdraft limits shown in the following table. However, these derived figures should be regarded as an approximation only, since there are unavoidable differences in the basis of compilation of the two series.

MAJOR TRADING BANKS: NEW AND INCREASED LENDING COMMITMENTS AND OVERDRAFT LIMITS, 1963-64 TO 1967-68 AND JULY 1967 TO DECEMBER 1968

(*Source:* Reserve Bank of Australia)

($ million)

New and increased lending commitments(a)				*Overdraft limits(b)*	
Weekly average for period ending second Wednesday of—	*Aggregate*	*Term loan component*	*Farm development component*	*Second Wednesday of—*	*Total outstanding*
1963–64(*c*)	22.5	1.7	..	1964—July	3,801.0
1964–65(*c*)	21.7	1.4	..	1965—July	3,932.2
1965–66(*c*)	23.0	1.3	0.1	1966—July	4,098.4
1966–67(*c*)	31.3	2.5	0.5	1967—July	4,512.9
1967–68(*c*)	33.2	2.1	0.5	1968—July	4,983.9
1967–68—				1967–68—	
July	36.9	5.9	0.6	July	4,512.9
August	32.6	2.0	0.6	August	4,550.5
September	30.7	1.7	0.5	September	4,584.1
October	28.4	1.5	0.5	October	4,608.0
November	33.5	1.7	0.6	November	4,638.2
December	34.5	1.6	0.6	December	4,693.5
January	29.7	1.7	0.4	January	4,725.9
February	29.7	2.3	0.4	February	4,741.9
March	34.8	2.6	0.4	March	4,789.0
April	38.5	2.0	0.5	April	4,854.8
May	35.9	2.1	0.4	May	4,892.4
June	34.9	2.9	0.5	June	4,939.8
1968–69—				1968–69	
July	35.5	2.6	0.6	July	4,983.9
August	41.0	8.3	0.5	August	5,033.2
September	30.7	2.0	0.6	September	5,050.1
October	35.6	4.6	0.5	October	5,072.1
November	31.9	2.0	0.6	November	5,105.2
December	33.1	4.2	0.7	December	5,108.1

(*a*) Excludes commitments in respect of temporary advances to woolbuyers. (*b*) Excludes limits in respect of temporary advances to woolbuyers, term loans and farm development loans. (*c*) Year ended second Wednesday of July.

The following table shows new and increased lending commitments in respect of the Major Trading Banks to selected industrial groups for the six months ended July 1967 to January 1969. The classification is an abridgment of that used for bank advances (*see* page 634).

The table indicates the sources of demand for new lending. If taken in conjunction with the classification of overdraft limits outstanding (*see* foot of page), it shows the approximate rate of cancellations and reductions of limits in the main industrial groups.

MAJOR TRADING BANKS: NEW AND INCREASED LENDING COMMITMENTS TO SELECTED INDUSTRIAL GROUPS(*a*), SIX MONTHS ENDED JULY 1967, JANUARY 1968, JULY 1968, JANUARY 1969

(*Source:* Reserve Bank of Australia)

($ million)

	Six months ended second Wednesday of—							
	July 1967		*January 1968*		*July 1968*		*January 1969*	
Classification	*Aggregate*	*Term loan component*	*Aggregate*	*Term loan component*	*Aggregate*	*Term loan component*	*Aggregate*	*Term loan component*
Business—								
Agriculture, grazing and dairying	(b)189.7	25.9	(b)167.3	18.6	(b)198.4	20.6	(b)151.8	18.4
Manufacturing	150.0	18.2	101.7	15.0	134.7	25.5	117.2	22.5
Finance	33.2	0.1	39.0	0.1	27.5	0.3	22.1	0.1
Commerce(*a*)	112.9	2.5	115.8	2.1	116.9	6.0	114.4	3.2
Building and construction	36.8	1.7	44.2	0.7	44.7	1.2	43.9	1.9
Persons—								
Advances for building or purchase of own home (to individuals)	99.7	..	98.4	..	102.7	..	95.5	..
Other (including personal loans)	102.6	..	106.2	..	130.2	..	125.1	..
All other	186.4	32.5	149.9	7.5	146.7	9.4	195.5	54.9
Total	(*b*)911.2	**81.0**	(*b*)822.4	**44.0**	(*b*)901.7	**63.1**	(*b*)865.5	**100.9**

(*a*) Excludes commitments in respect of temporary advances to woolbuyers. (*b*) Includes Farm Development Loan approvals: $15.9 million, July 1967; $13.5 million, January 1968; $12.3 million, July 1968; $14.3 million, January 1969.

The following table shows the classification of overdraft limits outstanding in respect of the Major Trading Banks for December 1965 to January 1969. The classification is similar to that used for advances (*see* page 634). The table shows the trend of net new lending classified by industry. If used in conjunction with the classification of bank advances, it shows the range of limits usage by industry, and if used in conjunction with the classification of new and increased lending commitments (*see* above), it shows the approximate rate of cancellations and reductions of limits by industry.

MAJOR TRADING BANKS: CLASSIFICATION OF OVERDRAFT LIMITS OUTSTANDING(*a*), DECEMBER 1965 TO JANUARY 1969

(*Source:* Reserve Bank of Australia)

($ million)

	Second Wednesday of—						
Classification	*December 1965*	*July 1966*	*January 1967*	*July 1967*	*January 1968*	*July 1968*	*January 1969*
RESIDENT BORROWERS							
Business overdraft limits classified according to main industry of borrower—							
Agriculture, grazing and dairying—							
Mainly sheep grazing	317.1	334.4	352.6	368.0	386.4	407.6	417.1
Mainly wheat growing	78.9	81.1	88.7	93.8	110.0	126.6	132.5
Mainly dairying and pig raising	104.2	104.2	103.9	109.0	113.5	120.6	119.5
Other	189.1	201.2	208.9	225.3	237.5	257.9	265.7
Total, agriculture, etc.	689.2	720.8	754.1	796.1	847.4	912.8	934.9

(*a*) Excludes limits in respect of temporary advances to woolbuyers and term loans.

MAJOR TRADING BANKS: CLASSIFICATION OF OVERDRAFT LIMITS OUTSTANDING(*a*), DECEMBER 1965 TO JANUARY 1969—*continued*

($ million)

Classification	*Second Wednesday of—*						
	December 1965	*July 1966*	*January 1967*	*July 1967*	*January 1968*	*July 1968*	*January 1969*
RESIDENT BORROWERS—*continued*							
Manufacturing	997.1	1,020.3	1,025.4	1,099.0	1,099.9	1,153.5	1,162.1
Transport, storage and communication	63.6	66.0	67.6	71.9	77.3	84.6	89.0
Finance—							
Building and housing societies	56.0	56.1	55.2	53.0	52.0	56.3	56.0
Pastoral finance companies	88.7	80.0	81.1	75.9	95.0	101.4	99.1
Hire purchase and other finance companies	81.8	76.4	80.5	81.9	79.5	89.1	78.6
Other	74.0	69.6	71.1	72.8	72.0	80.9	81.9
Total, finance	300.6	282.1	288.0	283.7	298.5	327.7	315.6
Commerce(*a*)—							
Retail trade	384.6	384.6	405.2	425.3	420.3	425.8	438.3
Wholesale trade	283.6	290.7	289.8	289.8	302.1	302.2	319.6
Total, commerce(a)	668.2	675.3	695.0	715.1	722.4	728.0	757.9
Building and construction	124.2	127.4	135.9	145.1	163.3	172.2	181.8
Other businesses—							
Mining	47.1	52.4	62.1	66.6	93.2	85.3	81.7
Other	292.7	306.5	322.1	365.6	389.3	423.4	442.1
Total, other businesses	339.8	358.9	384.2	432.2	482.5	508.7	523.8
Unclassified	24.7	26.2	24.7	26.9	28.6	28.7	31.9
Total, business overdraft limits	3,207.5	3,277.0	3,374.8	3,570.1	3,719.9	3,916.3	3,996.9
Overdraft limits of public authorities	134.8	137.3	152.8	153.6	163.9	158.9	182.8
Personal overdraft limits—							
Building or purchasing own home	273.8	280.7	297.1	320.3	332.8	341.9	342.2
Other	275.1	297.4	320.7	354.6	391.0	444.1	468.4
Total, personal overdraft limits	548.9	578.1	617.7	674.8	723.8	786.0	810.6
Overdraft limits of non-profit organisations	102.7	104.3	109.1	112.5	116.6	120.2	119.0
Total, overdraft limits of resident borrowers	*3,993.8*	*4,096.8*	*4,254.4*	*4,511.0*	*4,724.2*	*4,981.4*	*5,109.4*
NON-RESIDENT BORROWERS							
Overdraft limits of non-resident borrowers	*1.5*	*1.5*	*1.5*	*1.9*	*1.7*	*2.5*	*3.0*
TOTAL OVERDRAFT LIMITS							
Grand total	3,995.3	4,098.4	4,256.0	4,512.9	4,725.9	4,983.9	5,112.4

(*a*) Excludes limits in respect of temporary advances to woolbuyers, term loans and farm development loans.

Major Trading Banks—bank advances and fixed deposits, by rate of interest

MAJOR TRADING BANKS: ADVANCES, BY RATE OF INTEREST(*a*) JUNE 1965 TO 1968 AND DECEMBER 1968

(*Source:* Reserve Bank of Australia)

(Proportion at each rate to total—per cent)

Interest rate per annum	*End of—* *June 1965*	*June 1966*	*June 1967*	*June 1968*	*Dec. 1968*
5 per cent and less	4.0	3.6	3.6	3.5	4.3
More than 5 per cent but less than 5½ per cent	2.3	1.3	1.0	0.8	0.1
5½ per cent	5.0	6.1	0.8	0.6	0.8
More than 5½ per cent but less than 6 per cent	7.9	7.0	4.4	4.4	0.6
6 per cent	6.7	4.9	10.0	7.9	5.0
More than 6 per cent but less than 6½ per cent	9.1	9.3	9.8	8.5	9.2
6½ per cent	10.0	10.2	9.8	9.3	8.1
More than 6½ per cent but less than 7 per cent	17.1	17.5	16.8	17.0	9.6
7 per cent	10.7	11.5	11.1	11.0	16.4
More than 7 per cent but less than 7½ per cent	27.1	28.5	32.6	36.1	10.8
7½ per cent	..	..	..	..	33.8
More than 7½ per cent(*b*)	..	..	0.1	0.7	1.3
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(*a*) Excludes term loans and farm development loans. (*b*) Comprises categories of loans specifically exempted from the prescribed maximum overdraft requirement—short-term mortgage and bridging loans and post-shipment wool advances subject to a disincentive rate of interest.

On 17 November 1960 the maximum rate chargeable on advances was 7 per cent, but the average rate of interest on all advances was not to exceed 6 per cent. The maximum average rate requirement was discontinued on 13 April 1962. The maximum rate chargeable on advances was reduced from 7 per cent per annum to 6½ per cent per annum on 1 April 1963, and was raised to 7 per cent per annum on 27 April 1964, to 7¼ per cent per annum on 10 March 1965, and to 7½ per cent per annum on 14 October 1968.

MAJOR TRADING BANKS: FIXED DEPOSITS(*a*), BY RATE OF INTEREST, JUNE 1964 TO 1968 AND DECEMBER 1968

(*Source:* Reserve Bank of Australia)

(Proportion at each rate to total—per cent)

Interest rate per annum	*End of—* *June 1964*	*June 1965*	*June 1966*	*June 1967*	*June 1968*	*Dec. 1968*
3	0.2	..	..	..	..	..
3¼	5.6	..	..	0.1	..	..
3½	51.1	0.2	..	..	..	..
3¾	20.7	2.3	0.1	..	..	..
4	22.4	32.6	0.5	26.6	25.4	0.4
4¼	..	37.0	35.4	27.1	29.3	42.8
4½	..	27.9	64.0	46.1	45.0	42.6
4¾	..	..	..	..	0.3	14.2
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(*a*) Excludes Commonwealth and State Government fixed deposits.

Cheque-paying banks—interest rates on deposits

CHEQUE-PAYING BANK FIXED DEPOSIT RATES SINCE 1960: AUSTRALIA

(Per cent per annum)

Date from which operative	*Deposits for—*			
		3 months but less than 12 months		*12 months*
1960—17 November		4		4½
1961—1 July		..		4¼
1962—13 April		3¾		4
				12 months to 15 months
10 September		..		4
1963—1 April		3¼		3½
	30 days but less than 3 months	*3 months but less than 12 months*		
1964—8 April	3¾	3¾		4
			12 months to 18 months	*Over 18 months to 24 months*
29 September	..	..	4	4¼
1965—10 March	4¼	4¼	4½	4½
1966—17 August	4	4	4¼	..
			12 months but less than 18 months	*18 months to 24 months*
1968—27 June	4¼	4¼	4½	4¾

Cheque-paying banks—debits to customers' accounts

Statistics of debits to customers' accounts have been collected since September 1945. Generally they represent the total of all cheques drawn by the customers of the banks. The following table shows the average weekly debits to customers' accounts of all cheque-paying banks (including the Rural Credits Department of the Reserve Bank and the Commonwealth Development Bank). Debits to accounts of Australian Governments in capital cities are excluded, as they are subject to abnormal influences and are not uniform for each State.

CHEQUE-PAYING BANKS: AVERAGE WEEKLY DEBITS TO CUSTOMERS' ACCOUNTS, STATES AND TERRITORIES, 1963-64 TO 1967-68

(Excluding debits to Commonwealth and State Government accounts in capital cities)

($ million)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1963–64	824.8	733.2	213.2	155.1	96.4	37.1	2.8	11.5	2,073.9
1964–65	935.2	825.3	232.9	170.4	106.3	41.3	3.4	14.5	2,329.3
1965–66	949.0	847.7	232.5	172.8	122.4	43.2	3.8	15.3	2,386.7
1966–67	1,080.2	940.0	256.9	184.4	138.6	47.3	4.5	17.0	2,668.9
1967–68	1,257.9	1,041.8	289.2	201.7	169.1	51.3	5.9	21.2	3,038.0

Trading bank charges

In October 1962 the trading banks instituted a system of charges on current accounts, and abolished the interstate exchange rates obtaining prior to this date. Details of interstate exchange rates prior to October 1962 may be found in Year Book No. 48, page 785. Charges on current account comprise a basic maintenance fee, a ledger activity fee and a cheque collection fee, each calculated on a quarterly basis and debited as a composite item to accounts four times a year. These charges were revised from 1 October 1966. The following are the current charges.

Basic maintenance current account fee. Sixty-five cents quarterly (non-rebated).

Ledger activity fee (*quarterly*). Up to ½ folio (20 entries), 25 cents; over ½ folio to 1 folio, 80 cents; over 1 folio to 2 folios, $2.25; over 2 folios to 3 folios, $5; over 3 folios to 4 folios, $7.75; over 4 folios to 5 folios, $10.50; over 5 folios to 6 folios, $13.25; over 6 folios to 7 folios, $16; over 7 folios to 15 folios, $16, plus $2.25 per folio or part thereof exceeding 7; over 15 folios to 35 folios, $34, plus $1.75 per folio or part thereof exceeding 15; over 35 folios, $69, plus $1.25 per folio or part thereof exceeding 35. Rebates of one free folio (or equivalent of approximately 40 entries) will be allowed for each complete $1,000 minimum quarterly credit balance. Where rebates are applicable the number of free folios is deducted before the activity fee is calculated.

Collection fee on cheques, etc., deposited. Up to 20 cheques per quarter, free; 21 to 100, 60 cents, plus 30 cents per 10 cheques or part thereof exceeding 20; 101 to 500, $3.00, plus $1.50 per each 50 or part thereof exceeding 100; 501 to 1,000, $15, plus $3 for each 100 or part thereof exceeding 500; 1,001 to 10,000, $30, plus $15 per each 500 or part thereof exceeding 1,000; 10,001 to 50,000, $300, plus $20 per each 1,000 or part thereof exceeding 10,000; 50,001 to 100,000, $1,100, plus $75 per each 5,000, or part thereof exceeding 50,000; over 100,000, $1,850, plus $125 per each 10,000 or part thereof exceeding 100,000.

Savings banks

Savings banks in Australia

For information on the origin of savings banks in Australia and the facilities currently available, *see* Year Book No. 46, page 779, and earlier issues.

All savings banks, including trustee savings banks, but not State savings banks, are subject to the *Banking Act* 1959–1967. Details of this Act and the special provisions applying to savings banks are given in Year Book No. 46, pages 759–60.

Commonwealth Savings Bank. The Commonwealth Savings Bank of Australia was established as a separate institution on 9 June 1928, having functioned previously as a department of the Commonwealth Bank (for particulars of the origin of the Savings Bank Department and the extension of its services *see* Year Book No. 46, page 782, and earlier issues). It has since then operated independently, publishing its own balance-sheets and profit and loss accounts. The *Commonwealth Bank Act* 1927, which provided for the establishment of the Commonwealth Savings Bank as a separate institution, provided for a Commission of three members to manage the savings bank. This Commission was never appointed, and the *Commonwealth Bank Act* 1945 placed the Commonwealth Savings Bank under the control of the Governor of the Commonwealth Bank. Under the provisions of the *Commonwealth Banks Act* 1959–1968, which came into operation on 14 January 1960, the Commonwealth Savings Bank was maintained in the same form, but was placed under the control of the Commonwealth Banking Corporation (*see also* page 618).

State savings banks. State savings banks at present operating (with date of establishment shown in parentheses) are: The State Savings Bank of Victoria (1841); The Savings Bank of South Australia (1848); the Savings Bank Division of the Rural and Industries Bank of Western Australia (1956).

Trustee savings banks. Two trustee savings banks, The Hobart Savings Bank and Launceston Bank for Savings, operate within Tasmania. These banks commenced business in 1845 and 1835 respectively.

Private savings banks. The Bank of New South Wales Savings Bank Ltd., the Australia and New Zealand Savings Bank Ltd., and the C.B.C. Savings Bank Ltd. commenced business in 1956, the E.S. & A. Savings Bank Ltd. in 1961, The Bank of Adelaide Savings Bank Ltd., The National Bank Savings Bank Ltd., and The Commercial Savings Bank of Australia Ltd. in 1962.

Savings banks, branches and agencies

SAVINGS BANKS: NUMBERS OF BRANCHES AND AGENCIES
30 JUNE 1968

Bank	*Branches*	*Agencies*
Commonwealth Savings Bank	957	8,098
Australia and New Zealand Savings Bank Ltd	640	929
The Bank of Adelaide Savings Bank Ltd	97	347
Bank of New South Wales Savings Bank Ltd	854	2,779
The Commercial Savings Bank of Australia Ltd	481	626
C.B.C. Savings Bank Ltd	470	349
E.S. & A. Savings Bank Ltd	425	465
The National Bank Savings Bank Ltd	700	407
The State Savings Bank of Victoria	508	687
The Savings Bank of South Australia	133	802
The Rural and Industries Bank of Western Australia	55	297
Launceston Bank for Savings	25	52
The Hobart Savings Bank	21	24
Total	5,366	15,862

Savings banks—balance-sheets

The information in the following tables for the Commonwealth Savings Bank, the trustee savings banks and the private savings banks has been obtained from the annual returns lodged with the Commonwealth Statistician under section 53 of the *Banking Act* 1959–1967, whereas that for State savings banks has been compiled from information in their annual reports.

SAVINGS BANKS: LIABILITIES(*a*), 1967 AND 1968
($'000)

Bank	*Paid-up capital*	*Reserve funds (used in the business of the bank)*	*Balance of profit and loss account*	*Total share-holders' funds*	*Deposi-tors' balances*	*Balances due to other banks*	*Bills payable and all other liabilities (b)*	*Total*
1968—								
Commonwealth Savings Bank of Australia . .	..	36,332	..	(c)36,332	2,651,689	2,053	88,117	2,778,191
State savings banks(*d*)—								
The State Savings Bank of Victoria(*e*) . .	..	32,903	1,288	(c)34,191	1,033,823	7,824	49,807	1,125,645
The Savings Bank of South Australia . .	..	27,342	330	(c)27,672	377,523	3,372	399	408,967
Total, State savings banks . . .	..	*60,245*	*1,618*	*(c)61,863*	*1,411,347*	*11,196*	*50,206*	*1,534,611*
Trustee savings banks—								
The Hobart Savings Bank	..	2,365	115	2,480	49,380	5	211	52,077
Launceston Bank for Savings . . .	..	2,150	98	2,248	43,029	..	254	45,532
Total, trustee savings banks . . .	..	*4,515*	*214*	*4,729*	*92,409*	*5*	*465*	*97,609*
Private savings banks—								
Australia and New Zealand Savings Bank Ltd	5,000	5,250	721	10,971	421,304	..	17,369	449,645
The Bank of Adelaide Savings Bank Ltd .	1,000	450	199	1,649	30,467	..	571	32,686
Bank of New South Wales Savings Bank Ltd .	8,000	8,500	2,199	18,699	860,321	..	28,648	907,669
The Commercial Savings Bank of Australia Ltd .	2,000	1,775	359	4,134	158,294	..	2,507	164,935
C.B.C. Savings Bank Ltd	4,000	3,900	361	8,261	238,183	..	5,468	251,912
E.S. & A. Savings Bank Ltd	2,000	1,850	91	3,941	155,934	..	4,303	164,177
The National Bank Savings Bank Ltd .	2,000	2,150	693	4,843	264,493	..	6,245	275,581
Total, private savings banks . . .	*24,000*	*23,875*	*4,623*	*52,498*	*2,128,997*	..	*65,110*	*2,246,605*
Total, all savings banks, 1968	**24,000**	**124,967**	**6,455**	**155,422**	**6,284,441**	**13,255**	**203,898**	**6,657,016**
Total, all savings banks, 1967	23,016	114,168	5,463	(*f*)143,130	5,840,042	12,652	185,530	6,181,354

(*a*) At various balance-sheet dates during 1968—*see* table on page 647. (*b*) Includes provision for contingencies. (*c*) Total reserve funds. (*d*) Excludes Savings Bank Division of the Rural and Industries Bank of Western Australia. (*e*) Includes *Crédit Foncier* Department. (*f*) Includes $481,920 final dividend proposed.

SAVINGS BANKS: ASSETS(*a*), 1967 AND 1968
($'000)

					Australian public securities			
					Commonwealth and States		*Local and semi-govern-mental author-ities*	
Bank	*Coin, bullion and notes*	*Deposits with Reserve Bank*	*Deposits in Australia with trading banks*	*Money at short call overseas*	*Treasury bills and notes*	*Other securities*		*Other public securities*
1968—								
Commonwealth Savings Bank of Australia	4,018	241,310	36,564	..	24,985	1,169,806	382,441	1,079
State savings banks(*b*)—								
The State Savings Bank of Victoria(*c*)	6,665	56,160	63,273	..	1,963	234,527	349,531	..
The Savings Bank of South Australia	269	10,438	24,556	..	..	135,299	75,375	..
Total, State savings banks	*6,934*	*66,598*	*87,829*	..	*1,963*	*369,826*	*424,906*	..
Trustee savings banks—								
The Hobart Savings Bank	149	550	3,061	..	..	9,600	23,185	..
Launceston Bank for Savings	96	100	2,920	..	..	10,866	14,449	..
Total, trustee savings banks	*245*	*650*	*5,981*	..	..	*20,466*	*37,634*	..
Private savings banks—								
Australia and New Zealand Savings Bank Ltd	..	42,480	7,812	..	..	135,469	124,393	1,013
The Bank of Adelaide Savings Bank Ltd	..	3,100	276	..	..	6,707	8,584	..
Bank of New South Wales Savings Bank Ltd	2,000	85,000	19,505	..	..	232,972	268,363	2,198
The Commercial Savings Bank of Australia Ltd	..	16,200	2,455	..	..	47,731	50,725	..
C.B.C. Savings Bank Ltd	..	23,200	2,024	..	1,200	99,645	52,864	..
E.S. & A. Savings Bank Ltd	15	12,935	2,079	..	2,795	45,471	49,510	..
The National Bank Savings Bank Ltd	..	28,500	4,358	..	500	88,620	83,996	..
Total, private savings banks	*2,015*	*211,415*	*38,510*	..	*4,495*	*656,616*	*638,436*	*3,211*
Total, all savings banks, 1968	13,212	519,973	168,884	..	31,443	2,216,714	1,483,416	4,291
Total, all savings banks, 1967	12,258	497,224	145,629	..	16,507	2,184,090	1,336,742	4,111

(*a*) For dates of balance-sheets *see* table on page 647. (*b*) Excludes Savings Bank Division of the Rural and Industries Bank of Western Australia. (*c*) Includes *Crédit Foncier* Department.

SAVINGS BANKS: ASSETS(*a*), 1967 AND 1968—*continued*

($'000)

Bank	*Other securities*	*Loans to authorised dealers in short-term money market*	*Cheques and bills of, and balances with and due from, other banks*	*Loans(b), advances and bills discounted*	*Bank premises, furniture and sites*	*Bills receivable and remittances in transit*	*All other assets*	*Total*
1968—								
Commonwealth Savings Bank of Australia .	..	3,650	1,230	837,804	46,940	1,618	26,745	2,778,191
State savings banks(*c*)—								
The State Savings Bank of Victoria(*d*) . .	..	4,500	..	377,945	16,000	..	15,081	1,125,645
The Savings Bank of South Australia . .	..	300	..	151,291	7,182	(*e*)	4,257	408,967
Total, State savings banks	..	*4,800*	..	*529,236*	*23,182*	..	*19,338*	*1,534,611*
Trustee savings banks—								
The Hobart Savings Bank	..	1,760	97	12,063	766	14	832	52,077
Launceston Bank for Savings . . .	..	1,100	57	14,472	728	..	743	45,532
Total, trustee savings banks . . .	..	*2,860*	*154*	*26,535*	*1,494*	*14*	*1,575*	*97,609*
Private savings banks—								
Australia and New Zealand Savings Bank Ltd	6,274	7,250	506	120,245	..	..	4,202	449,645
The Bank of Adelaide Savings Bank Ltd .	..	2,950	..	10,301	480	..	289	32,686
Bank of New South Wales Savings Bank Ltd .	399	..	4,816	276,866	7,100	..	8,450	907,669
The Commercial Savings Bank of Australia Ltd	..	2,900	..	42,785	564	..	1,575	164,935
C.B.C. Savings Bank Ltd	..	..	..	70,126	1,443	..	1,409	251,912
E.S. & A. Savings Bank Ltd	..	1,540	..	46,585	1,757	..	1,490	164,177
The National Bank Savings Bank Ltd . . .	..	1,500	..	65,652	..	..	2,455	275,581
Total, private savings banks	*6,673*	*16,140*	*5,322*	*632,559*	*11,344*	..	*19,870*	*2,246,605*
Total, all savings banks, 1968	6,673	27,450	6,706	2,026,134	82,960	1,632	67,527	6,657,016
Total, all savings banks, 1967	5,471	46,740	7,942	1,779,326	74,960	6,650	63,703	6,181,354

(*a*) For dates of balance-sheets *see* table on page 647. (*b*) Other than loans to authorised dealers in the short-term money market. (*c*) Excludes Savings Bank Division of the Rural and Industries Bank of Western Australia. (*d*) Includes *Crédit Foncier* Department. (*e*) Not available. Included in All other assets.

Savings banks—profit and loss accounts

SAVINGS BANKS: PROFIT AND LOSS, APPROPRIATION OF PROFITS AND DIVIDENDS, 1967 AND 1968

($'000)

Bank	Year ended	*Profit and loss*			
		Net earnings (a)	*Expenses (b)*	*Income, land and other taxes and payments in lieu of taxes*	*Net profit*
1968—					
Commonwealth Savings Bank of Australia	30.6.68	49,311	41,931	601	6,779
State savings banks(*c*)—					
The State Savings Bank of Victoria(*d*)	30.6.68	22,252	19,648	n.a.	2,603
The Savings Bank of South Australia	30.6.68	6,303	5,205	n.a.	1,098
Total, State savings banks		*28,555*	*24,854*	*n.a.*	*3,702*
Trustee savings banks—					
The Hobart Savings Bank	31.8.68	904	589	28	288
Launceston Bank for Savings	31.8.68	835	569	24	242
Total, trustee savings banks		*1,739*	*1,158*	*51*	*530*
Private savings banks—					
Australian and New Zealand Savings Bank Ltd	30.9.68	8,343	5,700	1,275	1,368
The Bank of Adelaide Savings Bank Ltd	30.9.68	722	352	141	228
Bank of New South Wales Savings Bank Ltd	30.9.68	17,009	10,917	2,826	3,266
The Commercial Savings Bank of Australia Ltd	30.6.68	2,895	1,796	490	609
C.B.C. Savings Bank Ltd	30.6.68	4,765	2,803	785	1,177
E.S. & A. Savings Bank Ltd	30.6.68	2,939	1,784	572	584
The National Bank Savings Bank Ltd	30.9.68	4,751	3,090	770	891
Total, private savings banks		*41,424*	*26,442*	*6,858*	*8,124*
Total, all savings banks, 1968		121,028	94,385	7,510	19,134
Total, all savings banks, 1967(*e*)		109,221	86,004	5,579	17,638

(*a*) Discount and interest earned, net exchange, commissions and other items (including transfers from contingencies accounts), after deducting interest paid and accrued on deposits, rebate on bills current at balance date, amounts written off assets, and losses on realisation of assets and transfers to the credit of contingencies accounts (out of which accounts provisions for all bad and doubtful debts have been made). (*b*) Includes directors' fees. (*c*) Excludes Savings Bank Division of the Rural and Industries Bank of Western Australia. (*d*) Includes *Crédit Foncier* Department. (*e*) Balancing dates as in 1968.

SAVINGS BANKS: PROFIT AND LOSS, APPROPRIATION OF PROFITS AND DIVIDENDS, 1967 AND 1968—*continued*

($'000)

		Profits appropriated to—				
					Dividends(b)	
Bank	*Year ended*	*Reserve funds (a)*	*Written-off bank premises*	*Other appro-priations*	*Paid and proposed*	*Rates per annum per cent*
1968—						
Commonwealth Savings Bank of Australia	30.6.68	1,886	1,389	(c)3,503	..	..
State savings banks(*d*)—						
The State Savings Bank of Victoria(*e*)	30.6.68	1,458	520	400	..	..
The Savings Bank of South Australia	30.6.68	1,100	(*f*)	..	..	..
Total, State savings banks		*2,558*	*520*	*400*	..	..
Trustee savings banks—						
The Hobart Savings Bank	31.8.68	175	103	10	..	..
Launceston Bank for Savings	31.8.68	100	130	12	..	..
Total, trustee savings banks		*275*	*233*	*22*	..	..
Private savings banks—						
Australia and New Zealand Savings Bank Ltd	30.9.68	650	..	..	600	12
The Bank of Adelaide Savings Bank Ltd	30.9.68	100	..	..	75	7.5
Bank of New South Wales Savings Bank Ltd	30.9.68	1,000	360	..	1,500	18.75
The Commercial Savings Bank of Australia Ltd	30.6.68	550	20	..	..	..
C.B.C. Savings Bank Ltd	30.6.68	700	..	..	400	10
E.S. & A. Savings Bank Ltd	30.6.68	350	..	..	200	10
The National Bank Savings Bank Ltd	30.9.68	750	..	..	100	5
Total, private savings banks		*4,100*	*380*	..	*2,875*	..
Total, all savings banks, 1968		8,819	2,523	3,925	2,875	..
Total, all savings banks, 1967(*g*)		8,195	2,404	4,222	2,232	..

(*a*) Excludes accumulated profits and profit and loss accounts. (*b*) Dividends paid or payable out of profits earned during year. (*c*) Provisions for settlements under Savings Bank Amalgamation Agreements, $1,616,997 and Commonwealth of Australia, $1,886,296. Under the terms of the Savings Bank Amalgamation Agreements relating to the absorption of the State savings banks by the Commonwealth Bank, the profits of the Commonwealth Savings Bank in New South Wales and Queensland are equally divided between the Bank and the former controlling authorities in those States. (*d*) Excludes Savings Bank Division of the Rural and Industries Bank of Western Australia. (*e*) Includes *Crédit Foncier* Department. (*f*) Included in expenses. (*g*) Balancing dates as in 1968.

Savings banks—operative accounts

The following table shows the number of operative savings bank accounts in existence at the end of June 1967 and 1968. The figures relate to the number of accounts and not necessarily to the number of depositors.

SAVINGS BANKS: NUMBER OF OPERATIVE ACCOUNTS(*a*) JUNE 1967 AND 1968

('000)

State or Territory	*End of June(b)—* 1967	1968
New South Wales	4,568	4,807
Victoria	4,026	4,234
Queensland	1,715	1,808
South Australia	1,371	1,418
Western Australia	905	970
Tasmania	413	432
Northern Territory	38	44
Australian Capital Territory	97	109
Australia	**13,134**	**13,823**

(*a*) Excludes school bank accounts and small inoperative accounts. (*b*) Private savings banks at last Wednesday in June, Launceston Bank for Savings at last Monday in June, other savings banks at end of June.

Savings banks—business transacted

SAVINGS BANKS: BUSINESS TRANSACTED IN AUSTRALIA, 1966-67 AND 1967-68(*a*)

($'000)

	1966–67				*1967–68*			
State or Territory	*Deposits*	*With-drawals (b)*	*Interest added (b)*	*Depositors' balances at end of year*	*Deposits*	*With-drawals (b)*	*Interest added (b)*	*Depositors' balances at end of year*
New South Wales	2,409,000	2,313,637	61,191	1,984,335	2,693,993	2,619,260	66,714	2,125,781
Victoria	2,622,516	2,496,370	54,584	1,926,713	2,967,486	2,867,741	59,071	2,085,529
Queensland	851,942	811,206	21,641	700,029	959,718	926,514	23,798	757,032
South Australia	784,741	757,442	19,011	605,167	841,915	825,034	21,642	643,690
Western Australia	467,401	439,255	9,790	330,807	557,289	525,587	11,093	373,602
Tasmania	189,026	175,621	5,300	167,106	203,850	198,986	5,857	177,827
Northern Territory	23,677	22,103	348	12,508	28,932	27,465	415	14,390
Australian Capital Territory	76,619	71,244	1,092	38,018	102,335	97,948	1,294	43,699
Australia	**7,424,926**	**7,086,878**	**172,957**	**5,764,683**	**8,355,517**	**8,088,535**	**189,884**	**6,221,549**

(*a*) Private savings banks at last Wednesday in June, Launceston Bank for Savings at last Monday in June, other savings banks at end of June. (*b*) Includes inter-branch transfers.

Savings banks—depositors' balances

The amount in credit in depositors' accounts and the average per head of population for each State and Territory at the end of June 1964 to 1968 are shown in the following table. Deposit stock and non-interest bearing cheque accounts at the State Savings Bank of Victoria and the Savings Bank of South Australia and fixed deposit and non-interest bearing cheque accounts at the Trustee Savings Banks in Tasmania are included in the depositors' balances shown in the following table. Separate details are not available.

SAVINGS BANKS: DEPOSITORS' BALANCES IN AUSTRALIA, JUNE 1964 TO 1968

End of June(a)—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
				AMOUNT ($ million)					
1964 . .	1,583	1,479	542	476	240	125	8	23	4,476
1965 . .	1,720	1,620	593	519	262	136	9	28	4,887
1966 . .	1,828	1,746	638	559	293	148	11	32	5,254
1967 . .	1,984	1,927	700	605	331	167	13	38	5,765
1968 . .	2,126	2,086	757	644	374	178	14	44	6,222
				PER HEAD OF POPULATION ($)					
1964 . .	385.41	476.24	336.72	458.38	296.58	342.49	157.16	289.92	400.86
1965 . .	411.85	512.08	360.60	486.40	316.95	368.93	170.47	312.54	429.11
1966 . .	431.29	542.19	380.84	510.38	345.32	399.53	187.34	328.54	452.92
1967 . .	460.73	588.42	411.39	544.47	377.48	443.93	210.80	367.00	488.11
1968 . .	485.07	627.38	437.01	572.06	410.82	465.48	230.14	387.48	517.13

(*a*) Private savings banks at last Wednesday in June, Launceston Bank for Savings at last Monday in June, other savings banks at end of June.

Savings banks—cheque accounts

At most savings banks, cheque accounts are available to non-profit organisations such as friendly, co-operative and charitable societies. Similar facilities are also available to other depositors at The State Savings Bank of Victoria, The Savings Bank of South Australia and the trustee savings banks in Tasmania. Details of the transactions on these accounts during the year ended June 1968 (excluding The Savings Bank of South Australia), together with the number of operative accounts and the amount on deposit at the end of June 1968, were as follows: deposits during the year $1,824.7 million; withdrawals during the year, $1,813.4 million; interest added during the year, $3.3 million; amount on deposit at end of year, $173.3 million; number of operative accounts at the end of year 356,146. These figures are included in the statistics in previous paragraphs.

School savings banks

Agencies of the savings banks have been established at most of the schools throughout Australia. Particulars of operative accounts within Australia at the end of June 1964 to 1968 appear below.

SCHOOL SAVINGS BANKS: AUSTRALIA, JUNE 1964 TO 1968

End of June(a)—	*Number of school agencies*	*Number of operative accounts*	*Deposits*	*Average deposit per operative account*
		'000	$'000	$
1964	9,878	1,294	20,374	15.75
1965	9,544	1,364	22,055	16.16
1966	9,999	1,390	23,313	16.77
1967	10,301	1,445	24,815	17.18
1968	10,400	1,516	26,482	17.47

(*a*) Private savings banks at last Wednesday in June, Launceston Bank for Savings at last Monday in June, other savings banks at end of June.

Savings banks—assets

The assets within Australia of all savings banks at the end of June 1967 and 1968 are shown in the following table. In the table on pages 645–6 assets are shown at balance-sheet dates which are not in June for some banks. In addition, the table on pages 645–6 excludes statistics for the Savings Bank Division of the Rural and Industries Bank of Western Australia, which are included in the table below.

SAVINGS BANKS: ASSETS WITHIN AUSTRALIA(*a*), JUNE 1967 AND 1968

($ million)

	End of June(b)—	
	1967	*1968*
Coin, bullion and Australian notes	12.3	13.3
Deposits with Reserve Bank	492.5	497.2
Deposits in Australia with trading banks	136.3	145.5
Australian public securities—		
Commonwealth and States (including Treasury bills and Treasury notes)	2,184.5	2,271.1
Local government and semi-governmental authorities	1,328.5	1,486.5
Other securities	5.4	5.7
Loans to authorised dealers in the short-term money market	50.5	23.9
Cheques and bills of other banks and balances with and due from other banks	0.8	1.0
Loans, advances and bills discounted—		
Housing	1,548.8	1,751.3
Other	222.3	266.1
Bank premises, furniture and sites	76.0	84.5
Bills receivable and all other assets	19.5	21.4
Total	6,077.3	6,567.5

(*a*) Includes assets in Papua, New Guinea and other external Territories. (*b*) Private savings banks at last Wednesday in June, Launceston Bank for Savings at last Monday in June, other savings banks at end of June.

Savings banks—rates of interest on deposits

SAVINGS BANKS: INTEREST RATES ON DEPOSITS(*a*), 30 JUNE 1964 TO 1968

(Per cent per annum)

	30 June—				
Size of account	*1964*	*1965*	*1966*	*1967*	*1968*
Ordinary accounts (including cheque accounts)—					
$1 to $10,000(*b*)	3.25	3.50	3.50	3.50	3.75
Friendly and other society accounts—					
$1 to $6,000	3.25	3.50	3.50	3.50	3.75
$6,001 and over	1.75	2.00	2.00	2.00	2.25

(*a*) Rates allowed by the Commonwealth Savings Bank, private savings banks and The State Savings Bank of Victoria. Trustee savings banks, The Savings Bank of South Australia and the Savings Bank Division of the Rural and Industries Bank of Western Australia allow slightly higher rates of interest. (*b*) Before 1 March 1967 no interest was payable on amounts greater than $6,000. From 1 March 1967 no interest is payable on amounts greater than $10,000.

Savings banks—predominant lending rates

The following table shows the predominant lending rates in respect of different types of loans by savings banks from 1961 to 1968.

SAVINGS BANKS: PREDOMINANT LENDING RATES OF INTEREST
(Per cent per annum)

Date of change in rate	*Loans to local government authorities*	*Crédit foncier housing loans (a)*	*Loans to co-operative housing societies*
1961—1 January	5.75—5.875	5.25—5.75	(b)5.25—5.50
1962—26 January	5.375—5.50	..	..
1963—11 April	..	4.75—5.25	4.75—5.00
17 June	5.00—5.125	..	..
2 October	4.875—5.00	..	..
1964—1 June	..	4.75—5.50	4.75—5.25
August	5.50	..	..
1965—1 April	..	5.00—5.75	5.00—5.50
8 April	5.75	..	..
1967—2 February	5.875	..	..
1968—1 August	..	5.50—6.25	5.50—6.00

(a) The rate of interest on *crédit foncier* loans may be varied only at the expiration of each ten years of the currency of a loan. (b) The changes in interest rates on 1 January 1961 applied to all societies then financed and to future loans.

FINANCE COMPANIES

Information relating to the lending operations of finance companies in Australia is given in the following tables. A comprehensive account of the scope of these statistics and fuller details of the transactions of finance companies is provided in the bulletin *Finance Companies, 1968* and in the monthly statements *Finance Companies.* For the purpose of these statistics, finance companies are defined as companies which are engaged mainly in providing to the general public (businesses as well as persons in their private capacity) credit facilities of the following types: hire purchase and other instalment credit for retail sales, wholesale hire purchase, other consumer and commercial loans, and factoring. The finance companies covered in these statistics, insofar as they provide instalment credit for retail sales, are also *included* in the statistics of Instalment Credit for Retail Sales (*see* pages 675–9).

In general, companies which are engaged both in financing activities and other activities come within the scope of these statistics, provided that the major portion of their assets consists of financial assets of the types listed above and or a major proportion of their income is derived from such assets. Companies are excluded if the major proportion of their balances outstanding consists of agreements written for the purpose of financing their own sales. Companies which are engaged mainly in financing, in any way, the operations of related companies ('related' as defined in the Companies Act) are also *excluded* from these statistics, as are unincorporated finance companies. Also *excluded* are the following classes of financial and quasi-financial institutions: banks; life insurance companies; fire, marine, and general insurance companies; short-term money market dealers; pastoral finance companies; investment companies; unit trusts; land trusts; mutual funds and management companies for the foregoing trusts and funds; pension and superannuation funds; building and friendly societies including credit unions.

Summary definitions of the categories into which finance agreements have been classified and of the items of data given in the tables are as follows.

Instalment credit for retail sales. This category is defined in the same way as in the Instalment Credit for Retail Sales statistics, and covers the operations of all types of instalment credit schemes undertaken by finance companies which relate primarily to the financing of retail sales of goods. In general, the term *instalment credit* is defined as relating to schemes in which repayment is made in regular predetermined instalments. Types of schemes covered include hire purchase, time payment, and personal loan schemes relating primarily to the financing of retail sales of goods. In these statistics, the term 'retail sales' relates not only to retail sales coming within the scope of the censuses of retail establishments conducted periodically by this Bureau, but includes also other sales of goods to final purchasers (e.g. plant and machinery, tractors, etc.). This category does not cover credit accounts which do not involve repayment by regular predetermined instalments, financing of sales of land and buildings, property improvements, or services such as repair work and travel facilities.

Wholesale hire purchase. This term is adopted in accordance with finance companies' usage, although not all the transactions covered by this category are strictly 'hire purchase' contracts. The category relates mainly to the financing of motor vehicle dealers' stocks held under bailment or floor plan schemes, but it also includes finance in respect of other trading stock.

Other consumer and commercial loans. This broad term is used to cover the following three categories.

Personal loans. All loans to persons in their private capacity, other than loans classified to the categories instalment credit for retail sales or mortgage loans.

Mortgage loans. All loans, for any business or private purpose, which are secured over houses, home units (whether new or existing) and residential land.

Commercial loans. All loans and advances to businesses, not included elsewhere in these statistics. Commercial loans secured on existing finance agreements are also included in this item. This category is sub-divided into the following two classes.

(*a*) *Loans and advances repayable at call or within ninety days* of the time of origin of the loan or investment (including loans and advances in the form of short-term commercial loans, intercompany lending, and notes, debentures, deposits, etc., repayable at call or within ninety days). Loans of this type to other finance companies are excluded.

(*b*) *Other* commercial loans and advances.

Factoring. The term 'factoring' is used by finance companies in different senses, but in these statistics it is applied to the category comprising loans on the security of 'trade' debts (i.e. debts due to businesses for goods and services supplied to other businesses for use in their business or for resale), and trade debts purchased. While there is little uniformity in the terminology used by finance companies, it is fairly common for finance companies to group these types of transactions as a separate category in their accounts.

Loans to related non-finance companies. This category includes loans made by a finance company to any related company other than a related finance company (as defined above). Investments in shares of related companies are excluded.

Leasing of business equipment and plant. This category comprises the transactions, by finance companies and their related companies, in the form of leasing agreements in respect of business equipment and plant. Broadly, a 'leasing agreement' is a legal agreement between an owner of property (the lessor) and a user of that property (the lessee) whereby the lessee compensates the lessor for permitting the lessee to retain possession and use of the property. The types of goods covered by leasing agreements in this bulletin are restricted to business equipment and plant including motor vehicles for business use. Leasing agreements relating to all other types of goods and property (including real estate and consumer goods) are excluded from the tables; the total balances outstanding in respect of such leasing agreements made by finance companies and their related companies are estimated not to have exceeded $2.5 m during the period July 1965 to June 1968. It is thought that almost all of the leasing transactions included in these statistics relate to agreements initially written for a period of at least eighteen months.

Bills of exchange. This item relates to the drawing and discounting of bills of exchange by finance companies and their related companies. A bill of exchange is defined for the purpose of these statistics in the *Bills of Exchange Act* 1909–1958 as 'an unconditional order in writing, addressed by one person to another, signed by the person giving it, requiring the person to whom it is addressed to pay on demand, or at a fixed or determinable future time, a sum certain in money to, or to the order of, a specified person, or to bearer'. Promissory notes used as collateral security for any of the other types of loans specified in this paragraph are excluded.

Amount financed. Amount financed is the actual amount of cash provided. It excludes interest, insurance, hiring, and other charges and initial deposits. For purchases of existing finance agreements and trade debts purchased, it represents the amount of cash paid to the seller. Amount financed in respect of instalment credit for retail sales agreements is further classified by type of commodity.

Balances outstanding. Balances outstanding represents the amounts owing on all finance agreements entered into prior to the end of the relevant period as shown in the books of the companies concerned. Accounting practice with respect to inclusion, in balances outstanding, of unmatured charges, interest and insurance differs between finance companies and between types of finance agreements. Because of this, separate details of balances outstanding are given in the tables for those contracts for which balances outstanding are recorded including such charges, and for those contracts for which balances outstanding are recorded excluding such charges. It is not practicable to adjust either to a common basis. Figures for 'balances outstanding excluding unmatured charges' do, however, include any charges, etc. (e.g. monthly and annual interest charges) accrued and unpaid at the end of the period concerned.

Collections and other liquidations of balances. This item covers cash collections of capital repayments, hiring charges, interest and insurance, and also other liquidations such as bad debts written off and rebates for early payouts. For reasons stated on page 653 separate details of collections and other liquidations are given for contracts recorded including charges, etc., and contracts recorded excluding charges, etc. The item 'collections and other liquidations' in respect of instalment credit for retail sales agreements is divided between cash collections and other liquidations.

Initial capital cost of business equipment and plant newly leased. The initial capital cost is the actual cost to finance companies for business equipment and plant newly leased during the period, and the depreciated value of business equipment and plant re-leased during that period. This item can be considered to correspond broadly with amount financed for the other categories listed on page 653.

Balances outstanding on leasing agreements. The basis of valuation specified for this item is the initial capital cost of business equipment and plant less depreciation to date. However, as yet it has not been practicable to obtain data on leasing transactions by finance companies on a completely uniform basis because of the varying methods adopted by companies to record these transactions in their accounts. For example, various methods are used to record and report depreciation of the business equipment and plant on lease. Furthermore, some companies record leasing transactions on a similar basis to other forms of financing (namely balances outstanding including unmatured charges) and so are unable to report on the specified basis. Although different methods are used by companies to report their leasing transactions, an attempt has been made to ensure that each company has reported on a consistent basis throughout the period covered by the statistics. In these circumstances, although the statistics of balances outstanding on leasing agreements should be treated with caution, it is thought that the movement in this series should provide a reasonable indication of the broad trend in this category of financing. This series should be regarded as subject to revision until agreement has been reached with companies on a uniform basis of reporting.

Amounts paid for bills acquired. This item includes the amounts paid for bills drawn by finance companies, bills discounted for the first time, and bills purchased from banks, authorised dealers in the short-term money market, and others. Broadly, this item corresponds with the item amount financed for the other categories listed on page 653.

Amounts received for bills sold and matured. This item comprises amounts received from sales of bills to banks, and to authorised dealers in the short-term money market, and from maturities (including early maturities). This item broadly corresponds with the item collections and other liquidations of balances for the other categories listed above.

Balances outstanding. This represents the amounts owing on all bills of exchange held at the end of the period.

Additional classifications of amount financed, and collections and other liquidations of balances are provided for the instalment credit for retail sales transactions of finance companies. Amount financed is classified according to the following types of commodities.

Motor vehicles, etc.: motor cars and motor cycles, commercial vehicles, tractors, caravans, trailers, motor parts and accessories, etc. (new and used separately).

Plant and machinery: farm machinery and implements, earth-moving equipment, aircraft, industrial plant and machinery, business machinery and equipment (including commercial refrigeration equipment), etc.

Household and personal goods: furniture, furnishings and floor coverings, domestic refrigerators, electrical goods, radios, television, musical instruments, bicycles, motor mowers, clothing, etc.

The item collections and other liquidations of balances in respect of instalment credit for retail sales agreements is divided between cash collections and other liquidations. Cash collections comprise the actual flow of cash from the public to finance companies; other liquidations consist of rebates for early payouts, bad debts written off, and any other reductions in balances outstanding other than by cash collections.

Summary of transactions by finance businesses

The following table gives a summary of the amount financed, collections and other liquidations of balances, and balances outstanding in Australia for the years 1964–65 to 1967–68.

FINANCE COMPANIES: SUMMARY, AUSTRALIA, 1964-65 TO 1967–68
($ million)

Year	Amount financed	Collections and other liquidations			Balances outstanding at end of period		
		Contracts including charges	Contracts excluding charges	All contracts	Contracts including charges	Contracts excluding charges	All contracts (a)
1964–65	1,923.6	1,001.1	1,057.1	2,058.2	1,455.3	363.1	1,818.3
1965–66	1,916.0	1,067.2	1,058.5	2,125.7	1,481.2	431.0	1,912.3
1966–67	2,301.8	1,167.5	1,355.5	2,523.0	1,635.4	471.8	2,107.2
1967–68	2,721.0	1,255.0	1,543.4	2,798.4	1,858.7	580.5	2,439.1

(a) Amounts shown in this column are intended to provide a broad overall measure of total balances outstanding. *However, movements in this series may be affected by changes in the proportions of the two components of the series to the total.*

Amount financed, by type of agreement

The following table shows the separate amount financed, for each type of agreement, i.e. instalment credit for retail sales, wholesale hire purchase, personal loans, mortgage loans, commercial loans (repayable at call or within ninety days, and other), and factoring, in Australia for the years 1964–65 to 1967–68.

FINANCE COMPANIES: AMOUNT FINANCED, BY TYPE OF AGREEMENT
AUSTRALIA, 1964-65 TO 1967-68
($ million)

Year	Instalment credit for retail sales	Wholesale hire purchase	Other consumer and commercial loans				Factoring	Total
			Personal loans	Mortgage loans	Commercial loans			
					Call or within 90 days	Other commercial loans		
1964–65	647.3	482.5	63.2	222.7	264.4	154.7	88.8	1,923.6
1965–66	612.7	488.2	70.6	222.6	288.1	153.1	80.7	1,916.0
1966–67	689.3	719.0	95.4	279.8	323.0	127.3	68.0	2,301.8
1967–68	816.6	854.7	116.3	340.1	385.3	133.2	74.8	2,721.0

Collections and other liquidations of balances by type of agreement

The following table shows the collections and other liquidations of balances, by type of agreement, i.e. instalment credit for retail sales, wholesale hire purchases, other consumer and commercial loans, and factoring, made by finance companies in Australia for the years 1964–65 to 1967–68.

FINANCE COMPANIES: COLLECTIONS AND OTHER LIQUIDATIONS OF BALANCES, BY TYPE OF AGREEMENT, AUSTRALIA, 1964-65 TO 1967-68

($ million)

	Contracts including charges			*Contracts excluding charges*					
					Other consumer and commercial loans				
Year	*Instalment credit for retail sales*	*Other consumer and commercial loans*	*Total*	*Wholesale hire purchase*	*Call or within 90 days*	*Other*	*Factoring*	*Total*	*All contracts*
1964–65 . . .	732.0	269.1	1,001.1	485.9	256.6	211.6	102.9	1,057.1	2,058.2
1965–66 . . .	778.9	288.3	1,067.2	474.9	271.6	218.5	93.5	1,058.5	2,125.7
1966–67 . . .	855.0	312.5	1,167.5	704.6	340.8	233.9	76.2	1,355.5	2,523.0
1967–68 . . .	913.8	341.2	1,255.0	836.3	362.4	261.6	83.1	1,543.4	2,798.4

Balances outstanding

The following tables show the balances outstanding in Australia, by type of agreement, and the total balances in each State at the end of each year 1964–65 to 1967–68.

FINANCE COMPANIES: BALANCES OUTSTANDING, BY TYPE OF AGREEMENT, AUSTRALIA, 1964–65 TO 1967–68

($ million)

	Contracts including charges			*Contracts excluding charges*					
					Other consumer and commercial loans				
End of year—	*Instalment credit for retail sales*	*Other consumer and commercial loans*	*Total*	*Wholesale hire purchase*	*Call or within 90 days*	*Other*	*Factoring*	*Total*	*All contracts (a)*
1964–65 . . .	977.5	477.8	1,455.3	64.1	39.5	233.8	25.6	363.1	1,818.3
1965–66 . . .	990.1	491.1	1,481.2	78.4	64.2	266.7	21.8	431.0	1,912.3
1966–67 . . .	1,087.6	547.8	1,635.4	100.7	48.4	300.9	21.7	471.8	2,107.2
1967–68 . . .	1,222.4	636.3	1,858.7	126.9	69.7	360.2	23.7	580.5	2,439.1

(*a*) Amounts shown in this column are intended to provide a broad overall measure of total balances outstanding. *However, movements in this series may be affected by changes in the proportions of the two components of the series to the total.*

FINANCE COMPANIES: BALANCES OUTSTANDING, ALL CONTRACTS STATES, 1964–65 TO 1967–68

($ million)

End of year—	*N.S.W. and A.C.T.*	*Vic.*	*Qld*	*S.A. and N.T.*	*W.A.*	*Tas.*	*Aust.*
1964–65. . . .	780.1	421.4	252.2	219.1	109.6	36.0	1,818.3
1965–66. . . .	811.9	445.8	272.4	219.3	124.3	38.6	1,912.3
1966–67. . . .	904.0	488.6	300.6	219.9	153.4	40.8	2,107.2
1967–68. . . .	1,040.7	558.0	347.1	238.2	208.6	46.4	2,439.1

Loans to related non-finance companies

The following table shows the balances outstanding of loans made by finance companies to related companies other than finance companies in Australia, at the end of each year 1965–66 to 1967–68. Information on this category was not collected before 1965–66.

FINANCE COMPANIES: LOANS TO RELATED NON-FINANCE COMPANIES, BALANCES OUTSTANDING, AUSTRALIA, 1965–66 TO 1967–68

($ million)

End of year—	*Balances outstanding*
1965–66	14.4
1966–67	14.6
1967–68	18.4

Transactions in bills of exchange

This table shows the amounts paid and the amounts received for bills of exchange by finance companies in Australia, together with the balances outstanding at the end of the period, for the years 1966–67 and 1967–68. Information on this category was not collected before 1966–67.

FINANCE COMPANIES: TRANSACTIONS IN BILLS OF EXCHANGE AUSTRALIA, 1966–67 AND 1967–68

($ million)

Year	*Amounts paid for bills acquired during period*	*Amounts received for bills disposed of during period*	*Balances outstanding at end of period*
1966–67.	38.7	36.9	4.3
1967–68.	112.3	98.9	15.7

Initial capital cost of goods newly leased

The following table shows the initial capital cost of business equipment and plant newly leased by finance companies in each State and in Australia for the years 1966–67 and 1967–68. Information on this category was not collected before 1966–67.

FINANCE COMPANIES: BUSINESS EQUIPMENT AND PLANT ON LEASE, INITIAL CAPITAL COST OF GOODS NEWLY LEASED, STATES, 1966–67 AND 1967–68

($ million)

Year	*N.S.W. and A.C.T.*	*Vic.*	*Qld*	*S.A. and N.T.*	*W.A.*	*Tas.*	*Aust.*
1966–67.	28.4	24.5	13.3	5.7	3.7	2.1	77.6
1967–68.	47.7	31.1	24.0	9.9	9.7	2.6	125.0

Balances outstanding of business equipment and plant on lease

The following table shows the balances outstanding of business equipment and plant on lease in each State and in Australia at the end of each year 1964–65 to 1967–68.

FINANCE COMPANIES: BUSINESS EQUIPMENT AND PLANT ON LEASE, BALANCES OUTSTANDING, STATES, 1964–65 TO 1967–68

($ million)

End of year—	*N.S.W. and A.C.T.*	*Vic.*	*Qld*	*S.A. and N.T.*	*W.A.*	*Tas.*	*Aust.*
1964–65. . . .	29.3	22.2	8.7	6.4	3.0	0.8	70.4
1965–66. . . .	35.5	29.5	11.1	7.5	3.9	1.9	89.4
1966–67. . . .	48.9	43.1	18.1	10.4	6.0	2.9	129.5
1967–68. . . .	71.1	54.0	32.8	16.4	11.9	4.7	190.9

Instalment credit for retail sales

The following table shows additional details for Australia, of the total instalment credit for retail sales transactions of finance companies. Amount financed is dissected by type of commodity, and collections and other liquidations of balances are divided into cash collections and other liquidations.

FINANCE COMPANIES: INSTALMENT CREDIT FOR RETAIL SALES AMOUNT FINANCED, COLLECTIONS AND OTHER LIQUIDATIONS, AND BALANCES OUTSTANDING, AUSTRALIA, 1964–65 TO 1967–68

($ million)

Year	*Amount financed*					*Collections and other liquidations*			*Balances outstanding at end of period*
	New motor vehicles	*Used motor vehicles*	*Household and personal goods*	*Plant and machinery*	*Total*	*Cash collections*	*Other liquidations*	*Total*	
1964–65 . .	266.5	270.4	71.4	39.1	647.3	698.1	33.9	732.0	977.5
1965–66 . .	249.3	250.1	70.2	43.0	612.7	747.0	31.9	778.9	990.1
1966–67 . .	254.9	262.1	120.9	51.3	689.3	823.5	31.5	855.0	1,087.6
1967–68 . .	318.2	302.2	137.3	59.0	816.6	883.9	29.9	913.8	1,222.4

INSURANCE

Legislation

Section 51 of the Commonwealth Constitution confers the necessary powers on the Commonwealth Parliament to legislate with respect to 'insurance other than State insurance; also State insurance extending beyond the limits of the State concerned'. Commonwealth legislation includes the *Marine Insurance Act* 1909–1966 defining the limits of marine insurance and regulating the terms of contracts, etc., the *Insurance Act* 1932–1966 requiring the lodgment of deposits by insurance companies, and the *Life Insurance Act* 1945–1965 generally regulating life insurance business in Australia. The *Marine Insurance Act* 1909–1966 and the *Insurance Act* 1932–1966 have limited application, and except for life insurance business, which is regulated by the *Life Insurance Act* 1945–1965, insurance business is conducted almost entirely under State laws.

Insurance Act 1932-1966

Companies, persons or associations of persons carrying on insurance business in Australia or in any Territory of Australia are required to lodge a deposit with the Commonwealth Treasurer. Money deposited is invested by the Treasurer in prescribed securities selected by the depositor, and all interest is paid to depositors. Deposits remain as security against liability to policy holders, and are available to satisfy judgments obtained in respect of policies. Deposits held by States on 1 February 1932 could, however, remain with the States subject to the conditions embodied in the laws of the States, and depositors to the extent of the value of these deposits were exempt from liability to make deposits under the Commonwealth Act.

The following are not regarded as insurance business under the Act: staff superannuation schemes; schemes of religious organisations solely for insurance of their property; friendly society, union and association schemes involving superannuation or insurance benefits to employees.

This Act does not apply to State insurance within the limits of the State concerned, and under the *Life Insurance Act* 1945–1965 ceased to apply to life insurance business.

Life Insurance Act 1945-1965

The objects of this Act are: (*a*) to replace all State legislation on the subject of life insurance, except that relating to the life insurance operations of State Government insurance offices within the State concerned, and to provide uniform legislation for the whole of Australia; (*b*) to appoint an Insurance Commissioner to exercise active supervision of the activities of life insurance companies, with a view to securing the greatest possible protection for policy holders; (*c*) to set up adequate machinery for dealing with any company that fails to maintain a required minimum standard of solvency. The Act came into operation on 20 June 1946. A summary of the provisions of the Act is given in Year Book No. 37, pages 595–7.

Deposits under Insurance Acts

Deposits lodged under the Insurance Acts at 30 June 1968 totalled $35.6 million, comprising $4.4 million held by the Commonwealth in respect of life insurance, and $31.2 million held by the Commonwealth in respect of other forms of insurance. The deposits consisted of Commonwealth Government securities $21.5 million, United Kingdom Government securities $1.8 million, fixed deposits $0.9 million, bank guarantees and undertakings $8.6 million, corporation debentures and stock $0.8 million, and titles and mortgages $2.1 million.

Life insurance

Since 1947, returns lodged under the *Life Insurance Act* 1945–1965 have been used to compile life insurance statistics. Except where otherwise indicated, the figures in the succeeding paragraphs refer only to Australian business. Business in the Territories of Papua and New Guinea is, however, included in the Australian figures. The information shown has been compiled from returns of life insurance business submitted in the financial years which ended during the year stated.

Offices transacting business

The number of offices which transacted life insurance business in Australia during 1967 was 45, including 12 overseas companies. Of the 33 Australian offices, 6 are purely mutual, including one which transacts general business in respect of which share capital is used, 25 are public companies, and 2 are State Government institutions. Of the total, 33 transacted ordinary business only and the remainder both ordinary and industrial business. Where possible, ordinary, industrial and superannuation business have been kept separate in the following tables.

Australian business—policies in existence

LIFE INSURANCE: POLICIES EXISTING IN AUSTRALIA, STATES AND TERRITORIES, 1967

	Insurance and endowment policies				*Annuity policies*		
State or Territory(a)	*Number of policies*	*Sum insured ($'000)*	*Bonus additions ($'000)*	*Annual premiums ($'000)*	*Number of policies*	*Annuities per annum ($'000)*	*Annual premiums ($'000)*
	ORDINARY BUSINESS						
New South Wales . .	1,351,435	3,674,479	412,211	98,618	805	341	5
Victoria . . .	1,123,141	3,572,264	378,442	89,437	762	356	4
Queensland(*b*) . .	762,345	2,089,061	242,036	50,301	195	62	..
South Australia(*c*) . .	486,289	1,314,852	134,983	34,403	193	56	1
Western Australia . .	338,214	984,912	102,195	25,302	136	46	2
Tasmania . . .	144,406	408,309	45,570	10,312	66	26	3
Australian Capital Territory	145,734	972,272	62,592	20,823	111	101	1
Australia(*b*) . .	**4,351,564**	**13,016,148**	**1,378,029**	**329,196**	**2,268**	**989**	**15**
	INDUSTRIAL BUSINESS						
New South Wales . .	976,212	380,205	30,627	15,608	..	..	..
Victoria . . .	772,705	293,090	23,868	11,805	..	..	..
Queensland(*b*) . .	340,943	124,787	9,741	5,265	..	..	..
South Australia(*c*) . .	269,364	89,808	7,034	3,761	..	..	..
Western Australia . .	168,709	63,960	4,961	2,649	..	..	..
Tasmania . . .	57,166	20,932	1,673	852	..	..	..
Australian Capital Territory	18,079	8,387	693	348	..	..	..
Australia(*b*) . .	**2,603,178**	**981,168**	**78,597**	**40,287**	..	..	..
	SUPERANNUATION BUSINESS						
New South Wales . .	280,283	509,414	54,231	16,348	109	3,558	819
Victoria . . .	119,368	1,544,686	74,411	38,914	577	8,002	3,164
Queensland(*b*) . .	84,707	319,930	23,922	10,569	14	84	17
South Australia(*c*) . .	45,543	259,263	23,789	9,047	37	117	17
Western Australia . .	38,773	179,701	14,543	6,252	22	357	102
Tasmania . . .	15,713	103,442	10,395	3,372	28	56	11
Australian Capital Territory	115,348	1,828,980	57,925	50,834	118	16,630	3,454
Australia(*b*) . .	**699,735**	**4,745,416**	**259,215**	**135,337**	**905**	**28,804**	**7,584**

(*a*) Location of register of policies. (*b*) Includes Papua and New Guinea. (*c*) Includes Northern Territory.

LIFE INSURANCE: AUSTRALIA

1950 TO 1967

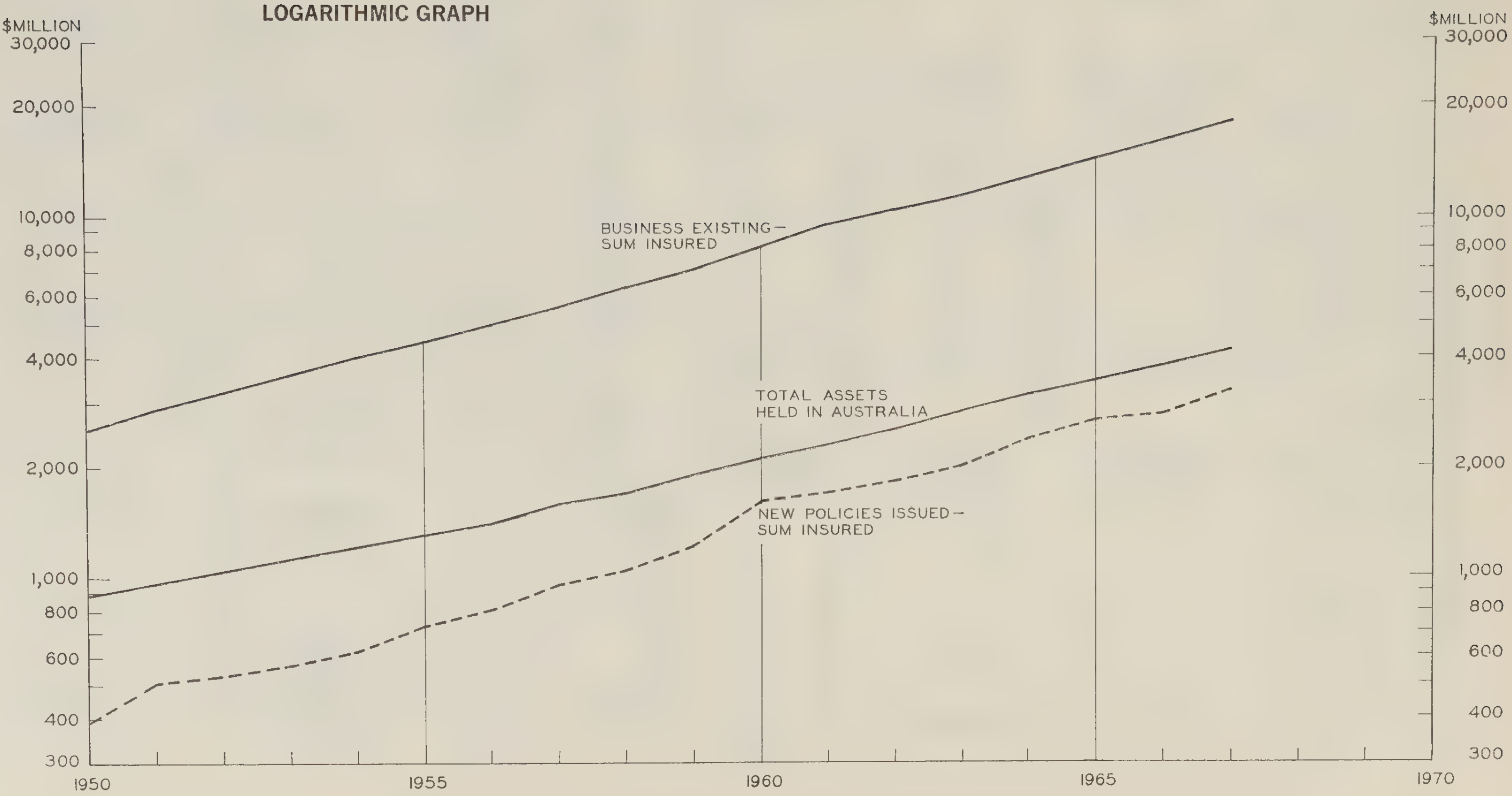


PLATE 37

LIFE INSURANCE: POLICIES EXISTING IN AUSTRALIA, 1963 TO 1967

	Insurance and endowment policies				*Annuity policies*	
At end of year—	*Number of policies*	*Sum insured ($ million)*	*Average sum insured per policy ($'000)*	*Annual premiums ($ million)*	*Number of policies*	*Annuities per annum ($ million)*
ORDINARY BUSINESS						
1963	3,794,150	8,377.0	2.2	229.8	2,618	1.0
1964	3,921,635	9,384.6	2.4	251.4	2,588	1.0
1965	4,058,813	10,457.6	2.6	275.0	2,467	1.0
1966	4,188,300	11,623.0	2.8	299.3	2,393	1.0
1967	4,351,564	13,016.1	3.0	329.2	2,268	1.0
INDUSTRIAL BUSINESS						
1963	2,952,808	777.1	0.3	34.0	..	..
1964	2,850,977	823.2	0.3	35.3	..	..
1965	2,755,146	870.9	0.3	36.7	..	..
1966	2,643,633	918.5	0.4	38.1	..	..
1967	2,603,178	981.2	0.4	40.3	..	..
SUPERANNUATION BUSINESS						
1963	607,297	2,632.8	4.3	75.9	1,757	25.3
1964	617,184	3,096.1	5.0	86.6	980	26.6
1965	645,837	3,599.1	5.6	100.4	853	23.5
1966	684,576	4,126.9	6.0	117.2	868	23.3
1967	699,735	4,745.4	6.8	135.3	905	28.8

New policies issued in Australia

LIFE INSURANCE: NEW POLICIES ISSUED IN AUSTRALIA STATES AND TERRITORIES, 1967

	Insurance and endowment policies				*Annuity policies*			
			Premiums				*Premiums*	
State or Territory(a)	*Number of policies*	*Sum insured ($'000)*	*Single ($'000)*	*Annual ($'000)*	*Number of policies*	*Annuities per annum ($'000)*	*Single ($'000)*	*Annual ($'000)*
ORDINARY BUSINESS								
New South Wales	119,943	568,419	343	13,825	26	21	141	..
Victoria	99,900	543,700	619	11,807	23	25	241	..
Queensland(*b*)	64,987	317,826	164	6,905	6	4	27	..
South Australia(*c*)	49,607	215,339	105	5,063	9	6	55	..
Western Australia	35,590	179,907	93	3,976	10	4	31	..
Tasmania	14,582	69,940	25	1,572	..	..	..	..
Australian Capital Territory	24,794	207,372	375	4,116	11	6	65	..
Australia(*b*)	**409,403**	**2,102,503**	**1,724**	**47,263**	**85**	**66**	**559**	..

(*a*) Location of register of policies. (*b*) Includes Papua and New Guinea. (*c*) Includes Northern Territory.

LIFE INSURANCE: NEW POLICIES ISSUED IN AUSTRALIA, 1967—*continued*

State or Territory(*a*)	*Insurance and endowment policies*				*Annuity policies*			
			Premiums				*Premiums*	
	Number of policies	*Sum insured ($'000)*	*Single ($'000)*	*Annual ($'000)*	*Number of policies*	*Annuities per annum ($'000)*	*Single ($'000)*	*Annual ($'000)*
			INDUSTRIAL BUSINESS					
New South Wales	54,012	56,611	..	2,234	..	..	..	..
Victoria	34,427	38,311	..	1,438	..	..	..	..
Queensland(*b*)	19,555	17,720	..	735	..	..	..	..
South Australia(*c*)	13,203	11,823	..	477	..	..	..	..
Western Australia	11,156	11,201	..	456	..	..	..	..
Tasmania	3,174	3,320	..	127	..	..	..	..
Australian Capital Territory	1,237	1,393	..	56	..	..	..	..
Australia(*b*)	**136,764**	**140,380**	..	**5,523**	..	..	..	..
			SUPERANNUATION BUSINESS					
New South Wales	22,735	78,492	413	2,314	10	793	64	243
Victoria	17,785	348,803	5,809	8,385	66	1,569	1,318	609
Queensland(*b*)	11,713	77,476	515	2,420	..	27	..	5
South Australia(*c*)	5,883	64,484	247	1,896	..	27	62	3
Western Australia	6,149	39,500	256	1,286	..	288	..	84
Tasmania	2,620	20,768	27	666	..	7	..	2
Australian Capital Territory	21,593	423,751	4,999	12,441	5	5,871	231	1,290
Australia(*b*)	**88,478**	**1,053,275**	**12,266**	**29,408**	**81**	**8,582**	**1,675**	**2,236**

(*a*) Location of register of policies. (*b*) Includes Papua and New Guinea. (*c*) Includes Northern Territory.

LIFE INSURANCE: NEW POLICIES ISSUED IN AUSTRALIA, 1963 TO 1967

Year	*Insurance and endowment policies*				*Annuity policies*			
			Premiums				*Premiums*	
	Number of policies	*Sum insured ($'000)*	*Single ($'000)*	*Annual ($'000)*	*Number of policies*	*Annuities per annum ($'000)*	*Single ($'000)*	*Annual ($'000)*
			ORDINARY BUSINESS					
1963	343,450	1,364,384	1,822	31,606	119	96	698	2
1964	362,118	1,544,162	835	35,338	115	79	615	3
1965	370,300	1,650,844	1,228	37,940	102	97	702	2
1966	380,276	1,816,850	1,273	40,390	75	79	457	1
1967	409,403	2,102,503	1,724	47,263	85	66	559	..
			INDUSTRIAL BUSINESS					
1963	130,681	105,970	..	4,232	..	..	..	..
1964	127,164	115,170	..	4,516	..	..	..	..
1965	130,249	120,337	..	4,767	..	..	..	..
1966	132,246	130,320	..	5,119	..	..	..	..
1967	136,764	140,380	..	5,523	..	..	..	..
			SUPERANNUATION BUSINESS					
1963	79,299	559,880	3,216	14,420	155	4,260	1,080	1,148
1964	78,353	764,038	5,391	18,636	216	4,576	1,339	1,247
1965	88,798	906,774	8,977	22,977	65	6,448	1,687	1,767
1966	105,455	929,364	7,745	26,548	57	3,815	2,447	1,058
1967	88,478	1,053,275	12,266	29,408	81	8,582	1,675	2,236

Policies discontinued or reduced in Australia

LIFE INSURANCE: POLICIES DISCONTINUED OR REDUCED IN AUSTRALIA STATES AND TERRITORIES, 1967(*a*)

	Insurance and endowment policies			*Annuity policies*		
State or Territory(b)	*Number of policies*	*Sum insured ($'000)*	*Annual premiums ($'000)*	*Number of policies*	*Annuities per annum ($'000)*	*Annual premiums ($'000)*
ORDINARY BUSINESS						
New South Wales	88,092	252,749	6,660	73	34	−2
Victoria	63,355	201,976	4,559	92	56	2
Queensland(*c*)	39,404	101,941	2,417	11	7	..
South Australia(*d*)	28,914	76,504	2,021	12	7	..
Western Australia	17,302	46,042	1,179	8	6	..
Tasmania	9,204	25,254	607	11	2	..
Australian Capital Territory	−132	4,937	−67	3	2	..
Australia(*c*)	**246,139**	**709,402**	**17,376**	**210**	**114**	..
INDUSTRIAL BUSINESS						
New South Wales	68,124	32,331	1,396	..	..	..
Victoria	50,674	21,248	895	..	..	..
Queensland(*c*)	22,618	8,876	396	..	..	..
South Australia(*d*)	19,805	7,531	330	..	..	..
Western Australia	10,840	5,158	224	..	..	..
Tasmania	4,453	2,055	86	..	..	..
Australian Capital Territory	705	487	21	..	..	..
Australia(*c*)	**177,219**	**77,688**	**3,347**	..	..	..
SUPERANNUATION BUSINESS						
New South Wales	26,861	63,120	2,074	48	738	257
Victoria	20,542	151,003	3,249	15	871	354
Queensland(*c*)	8,125	33,986	1,095	2	14	2
South Australia(*d*)	5,315	20,052	712	5	14	2
Western Australia	3,684	13,871	477	−1	34	2
Tasmania	2,473	10,967	330	3	8	1
Australian Capital Territory	6,319	141,729	3,372	−28	1,398	362
Australia(*c*)	**73,319**	**434,727**	**11,309**	**44**	**3,078**	**980**

(*a*) Includes policies matured, surrendered, forfeited, transferred to other State registers, converted to other classes of business, etc. (*b*) Location of register of policies. (*c*) Includes Papua and New Guinea. (*d*) Includes Northern Territory.

Minus sign (−) denotes an increase in existing business in the registers concerned due to an excess of transfers from other States or from overseas, or conversions from other classes of business over discontinuances in those registers.

LIFE INSURANCE: POLICIES DISCONTINUED OR REDUCED IN AUSTRALIA, 1963 TO 1967(*a*)

Year	*Insurance and endowment policies*			*Annuity policies*		
	Number of policies	*Sum insured ($'000)*	*Annual premiums ($'000)*	*Number of policies*	*Annuities per annum ($'000)*	*Annual premiums ($'000)*
			ORDINARY BUSINESS			
1963	240,296	530,906	13,802	107	42	10
1964	234,633	536,573	13,680	144	27	—1
1965	233,122	579,660	14,423	224	78	2
1966	250,789	651,365	16,055	149	65	4
1967	246,139	709,402	17,376	210	114	..
			INDUSTRIAL BUSINESS			
1963	253,840	72,390	3,408	..	..	..
1964	228,995	69,073	3,198	..	..	..
1965	226,080	72,618	3,311	..	..	..
1966	243,759	82,720	3,732	..	..	..
1967	177,219	77,688	3,347	..	..	..
			SUPERANNUATION BUSINESS			
1963	71,516	237,356	6,240	87	2,986	869
1964	68,419	300,734	7,890	994	3,311	910
1965	60,143	401,903	8,927	192	9,589	2,454
1966	66,716	401,595	9,966	45	3,968	1,125
1967	73,319	434,727	11,309	44	3,078	980

(*a*) *See* footnote (*a*) to preceding table.

Minus sign (—) denotes an increase in existing business in the registers concerned due to an excess of transfers from overseas registers to Australian registers, or conversions from other classes of business over discontinuances in those registers.

LIFE INSURANCE: POLICIES DISCONTINUED OR REDUCED IN AUSTRALIA BY CAUSE OF DISCONTINUANCE OR REDUCTION, 1963 TO 1967(*a*)(*b*)

Year	*Death or maturity*	*Surrender*	*Forfeiture*	*Other*	*Total*
		ORDINARY BUSINESS			
		NUMBER OF POLICIES			
1963 . . .	71,274	90,858	71,070	7,094	240,296
1964 . . .	76,288	91,291	65,390	1,664	234,633
1965 . . .	78,611	99,413	62,085	−6,989	233,122
1966 . . .	83,267	97,514	66,096	3,912	250,789
1967 . . .	89,311	97,985	62,126	−3,283	246,139

(*a*) Excludes annuities. (*b*) *See* footnote (*a*) on page 664.

LIFE INSURANCE: POLICIES DISCONTINUED OR REDUCED IN AUSTRALIA BY CAUSE OF DISCONTINUANCE OR REDUCTION, 1963 TO 1967(*a*)(*b*)—*continued*

Year	*Death or maturity*	*Surrender*	*Forfeiture*	*Other*	*Total*
		ORDINARY BUSINESS—*continued*			
		SUM INSURED ($'000)			
1963 . . .	56,128	185,152	229,140	60,486	530,906
1964 . . .	63,938	200,775	228,508	43,352	536,573
1965 . . .	69,642	275,498	236,586	−2,066	579,660
1966 . . .	77,334	242,970	277,012	54,049	651,365
1967 . . .	89,065	272,396	273,629	74,311	709,402
		INDUSTRIAL BUSINESS			
		NUMBER OF POLICIES			
1963 . . .	139,268	74,481	38,930	1,161	253,840
1964 . . .	131,755	65,017	31,531	692	228,995
1965 . . .	129,636	62,650	31,570	2,224	226,080
1966 . . .	147,666	63,121	31,821	1,151	243,759
1967 . . .	79,502	62,421	31,602	3,694	177,219
		SUM INSURED ($'000)			
1963 . . .	16,472	25,914	29,844	160	72,390
1964 . . .	16,507	23,960	28,454	152	69,073
1965 . . .	16,959	24,222	31,086	353	72,618
1966 . . .	20,090	27,646	34,730	255	82,720
1967 . . .	11,838	27,537	37,529	784	77,688
		SUPERANNUATION BUSINESS			
		NUMBER OF POLICIES			
1963 . . .	9,624	33,544	3,773	24,575	71,516
1964 . . .	10,241	34,949	1,546	21,683	68,419
1965 . . .	10,677	35,231	1,853	12,382	60,143
1966 . . .	10,395	34,878	1,485	19,958	66,716
1967 . . .	11,221	38,420	1,542	22,136	73,319
		SUM INSURED ($'000)			
1963 . . .	14,718	138,134	13,892	70,612	237,356
1964 . . .	17,258	173,784	11,804	97,888	300,734
1965 . . .	21,514	222,612	16,427	141,349	401,903
1966 . . .	23,752	232,595	14,597	130,651	401,595
1967 . . .	29,445	258,790	18,517	127,976	434,727

(*a*) Excludes annuities. (*b*) *See* footnote (*a*) on page 664.

Minus sign (−) denotes an increase in existing business due to an excess of transfers from overseas registers to Australian registers, or conversions from other classes of business over discontinuances.

Australian revenue from premiums

Details of revenue from premiums in respect of all offices transacting business in Australia are shown in the following tables for each State and the Australian Capital Territory for the year 1967 and for Australia for the years 1963 to 1967.

LIFE INSURANCE: AUSTRALIAN REVENUE FROM PREMIUMS, STATES AND TERRITORIES, 1967

($'000)

State or Territory(a)	*Insurance and endowment premiums*		*Consideration for annuities*		Total
	Single premiums	Other premiums	Single premiums	Other premiums	
ORDINARY BUSINESS					
New South Wales	358	98,493	144	2	98,997
Victoria	619	89,025	247	15	89,906
Queensland(b)	143	50,546	33	..	50,722
South Australia(c)	105	34,019	55	1	34,179
Western Australia	93	24,843	31	12	24,980
Tasmania	26	10,023	..	3	10,052
Australian Capital Territory	363	18,599	65	1	19,027
Australia(b)	**1,709**	**325,549**	**573**	**33**	**327,863**
INDUSTRIAL BUSINESS					
New South Wales	..	14,921	..	..	14,921
Victoria	..	11,388	..	..	11,388
Queensland(b)	..	4,993	..	..	4,993
South Australia(c)	..	3,641	..	..	3,641
Western Australia	..	2,486	..	..	2,486
Tasmania	..	814	..	..	814
Australian Capital Territory	..	322	..	..	322
Australia(b)	..	**38,564**	..	..	**38,564**
SUPERANNUATION BUSINESS					
New South Wales	1,128	17,018	158	954	19,258
Victoria	5,870	38,955	1,318	3,016	49,159
Queensland(b)	515	9,083	..	18	9,616
South Australia(c)	247	8,672	62	26	9,007
Western Australia	256	6,123	..	116	6,495
Tasmania	28	3,300	..	24	3,352
Australian Capital Territory	4,193	47,177	137	3,666	55,175
Australia(b)	**12,238**	**130,328**	**1,675**	**7,820**	**152,062**

(a) Location of register of policies. (b) Includes Papua and New Guinea. (c) Includes Northern Territory.

LIFE INSURANCE: AUSTRALIAN REVENUE FROM PREMIUMS, 1963 TO 1967

($'000)

Year	*Ordinary business*		*Industrial business*	*Superannuation business*		Total, all business combined
	Insurance and endowment premiums	Consideration for annuities	Insurance and endowment premiums	Insurance and endowment premiums	Consideration for annuities	
1963	228,978	738	32,860	77,108	8,526	348,210
1964	248,826	647	34,027	88,824	8,515	380,839
1965	273,060	726	35,404	106,964	9,007	425,161
1966	298,246	485	36,800	121,654	9,558	466,745
1967	327,258	606	38,564	142,566	9,495	518,489

Claims, etc., paid in Australia

Details of the claims, etc., paid on policies in each State and the Australian Capital Territory during the year 1967 and in Australia during the years 1963 to 1967 are shown in the following tables.

LIFE INSURANCE: PAYMENTS TO POLICY-HOLDERS IN AUSTRALIA, STATES AND TERRITORIES, 1967

($'000)

State or Territory(*a*)	Claims		Surrenders	Annuities	Cash bonuses	Total
	Death or disability	Maturity				
ORDINARY BUSINESS						
New South Wales	17,003	21,691	14,586	316	251	53,847
Victoria	15,718	18,051	10,590	327	243	44,929
Queensland(*b*)	8,442	9,019	5,820	60	114	23,455
South Australia(*c*)	4,657	6,330	4,410	54	85	15,536
Western Australia	3,258	4,055	2,784	48	64	10,209
Tasmania	1,763	1,468	1,488	24	31	4,772
Australian Capital Territory	3,358	819	1,045	101	63	5,386
Australia(*b*)	**54,199**	**61,432**	**40,722**	**931**	**851**	**158,134**
INDUSTRIAL BUSINESS						
New South Wales	1,275	3,817	2,538	..	..	7,630
Victoria	956	3,544	1,697	..	..	6,197
Queensland(*b*)	393	1,684	749	..	..	2,826
South Australia(*c*)	297	1,301	627	..	..	2,225
Western Australia	211	620	372	..	..	1,203
Tasmania	71	256	154	..	..	481
Australian Capital Territory	24	68	48	..	..	140
Australia(*b*)	**3,228**	**11,289**	**6,185**	..	..	**20,702**
SUPERANNUATION BUSINESS						
New South Wales	2,405	3,250	4,025	93	74	9,847
Victoria	5,639	5,641	10,208	688	825	23,002
Queensland(*b*)	988	1,039	1,569	7	19	3,622
South Australia(*c*)	815	1,546	994	12	6	3,374
Western Australia	564	913	884	12	8	2,381
Tasmania	480	630	718	8	1	1,837
Australian Capital Territory	5,603	4,603	9,251	1,582	92	21,130
Australia(*b*)	**16,495**	**17,622**	**27,649**	**2,401**	**1,025**	**65,193**

(*a*) Location of register of policies. (*b*) Includes Papua and New Guinea. (*c*) Includes Northern Territory.

LIFE INSURANCE: PAYMENTS TO POLICY-HOLDERS IN AUSTRALIA 1963 TO 1967

($'000)

Year	*Claims*	*Surrenders*	*Annuities*	*Cash bonuses*	*Total*
ORDINARY BUSINESS					
1963 . . .	72,692	27,872	786	602	101,952
1964 . . .	82,774	28,921	865	507	113,067
1965 . . .	91,082	33,347	877	650	125,956
1966 . . .	101,449	36,375	898	817	139,538
1967 . . .	115,631	40,722	931	851	158,134
INDUSTRIAL BUSINESS					
1963 . . .	19,236	5,574	..	..	24,810
1964 . . .	19,969	5,146	..	..	25,115
1965 . . .	21,024	5,397	..	..	26,422
1966 . . .	24,870	5,798	..	1	30,669
1967 . . .	14,517	6,185	..	..	20,702
SUPERANNUATION BUSINESS					
1963 . . .	16,450	14,508	1,208	756	32,922
1964 . . .	20,112	20,532	1,281	902	42,827
1965 . . .	24,884	24,218	1,602	857	51,561
1966 . . .	27,965	27,269	2,037	899	58,171
1967 . . .	34,117	27,649	2,401	1,025	65,193

Total revenue and expenditure

The following tables show particulars of the total life insurance revenue derived and of the total expenditure by life insurance offices both within and beyond Australia during each of the years 1963 to 1967.

LIFE INSURANCE: TOTAL REVENUE, 1963 TO 1967

($'000)

Year	*Insurance and endowment premiums*	*Consideration for annuities granted*	*Net interest, dividends and rents*	*All other revenue*	*Total revenue*	
					Inside Australia	*Outside Australia*
ORDINARY BUSINESS						
1963	323,118	7,126	140,570	15,470	337,968	148,316
1964	350,532	10,758	155,022	14,648	367,711	163,249
1965	385,424	11,662	172,379	18,095	407,905	179,655
1966	421,072	15,110	193,661	20,705	450,285	200,264
1967	445,631	10,483	206,809	20,042	493,627	189,342

LIFE INSURANCE: TOTAL REVENUE, 1963 TO 1967—*continued*

Year	*Insurance and endowment premiums*	*Consideration for annuities granted*	*Net interest, dividends and rents*	*All other revenue*	*Total revenue*	
					Inside Australia	*Outside Australia*
INDUSTRIAL BUSINESS						
1963	37,786	..	17,258	1,776	48,334	8,486
1964	38,787	..	17,703	257	49,573	7,174
1965	40,264	..	18,612	305	51,776	7,404
1966	41,789	..	19,818	402	54,436	7,574
1967	42,999	..	20,500	478	57,146	6,831
SUPERANNUATION BUSINESS						
1963	83,836	9,806	31,080	4,576	118,614	10,684
1964	96,326	9,468	36,249	2,224	132,697	11,570
1965	115,352	10,316	41,761	4,405	158,690	13,143
1966	131,721	11,033	48,219	4,412	179,483	15,904
1967	151,245	10,674	54,940	3,582	207,083	13,359

LIFE INSURANCE: TOTAL EXPENDITURE, 1963 TO 1967

($'000)

Year	*Claims and annuities paid*	*Surrenders*	*Cash bonuses paid to policy-holders*	*Commission*	*Salaries and directors' fees*	*All other expenditure*	*Total expenditure*	
							Inside Australia	*Outside Australia*
ORDINARY BUSINESS								
1963	119,830	38,872	1,002	30,920	20,944	29,684	160,960	80,292
1964	131,522	40,998	1,197	34,160	23,132	25,988	172,341	84,656
1965	145,087	47,544	1,160	37,649	25,528	35,764	197,348	95,383
1966	161,708	51,273	1,699	41,134	28,452	38,744	218,721	104,287
1967	172,580	56,485	1,624	44,113	30,887	(*a*)157,475	240,693	222,472
INDUSTRIAL BUSINESS								
1963	23,716	6,174	..	5,358	4,674	4,848	37,882	6,888
1964	24,006	5,742	..	5,610	4,769	3,430	37,172	6,385
1965	25,078	6,001	..	5,740	4,782	4,673	39,736	6,536
1966	29,409	6,376	1	6,001	5,026	3,751	43,598	6,965
1967	16,851	6,795	..	6,255	4,844	(*a*)10,089	34,093	10,741
SUPERANNUATION BUSINESS								
1963	19,498	16,042	852	3,980	4,134	7,690	47,220	4,976
1964	23,525	22,951	973	4,626	4,723	10,847	61,111	6,534
1965	28,945	26,543	932	5,326	5,668	14,288	74,114	7,591
1966	33,116	30,456	985	5,383	6,884	17,271	85,629	8,464
1967	39,255	29,330	1,105	5,888	7,657	(*a*)30,080	93,401	19,914

(*a*) Includes adjustments which have resulted from sterling devaluation on 18 November 1967.

Liabilities and assets

The liabilities of the Australian offices consist mainly of their insurance funds, but in the case of public companies there is a further liability on account of the shareholders' capital. The assets consist chiefly of government and municipal securities, mortgages, loans on policies, landed and house property, etc. Loans on personal security are granted by very few of the Australian offices. Separate details of liabilities in respect of Australian business are not available.

Total liabilities and assets. In the two tables which follow the details of liabilities and assets relate to all business (Australian and overseas) of Australian companies, the life insurance business of the two State Government offices, and the Australian business only of the twelve overseas companies operating in Australia. For various reasons several offices do not attempt the dissection of liabilities and assets according to type of business, and, therefore, the figures in the following tables relate to all types of business combined.

LIFE INSURANCE: TOTAL LIABILITIES, 1967

($ million)

	Life insurance business	*Other classes of business*	*Total liabilities*
Shareholders' capital—			
Authorised	..	62.5	62.5
Less un-issued	..	35.0	35.0
Subscribed capital	..	27.5	27.5
Paid-up—			
In money	..	21.4	21.4
Otherwise than in money	..	4.8	4.8
Total, paid-up capital	..	26.2	26.2
Life insurance statutory funds—			
Ordinary business	3,840.3	..	3,840.3
Industrial business	382.2	..	382.2
Superannuation business	953.9	..	953.9
Total, statutory funds	5,176.4	..	5,176.4
Funds in respect of other classes of business	..	16.5	16.5
General reserves	56.7	15.2	71.9
Profit and loss account balance	..	1.9	1.9
Total, shareholders' capital, insurance funds and reserves	*5,233.1*	*59.8*	*5,292.9*
Other liabilities—			
Deposits	36.7	15.5	52.2
Staff provident and superannuation funds	0.5	..	0.5
Claims admitted or intimated but not paid	51.1	17.4	68.5
Premiums paid in advance and in suspense	4.7	..	4.7
Sundry creditors	24.0	2.6	26.6
Bank overdraft	33.2	0.4	33.6
Reserves and provisions for taxation	34.1	2.7	36.8
All other liabilities	2.7	8.9	11.7
Grand total	**5,420.2**	**107.3**	**5,527.5**

LIFE INSURANCE: TOTAL ASSETS, 1967
($ million)

	Total assets			*Amount of assets held in Australia*		
	Life insurance business	*Other classes of business*	*Total*	*Life insurance business*	*Other classes of business*	*Total*
Fixed assets—						
Freehold and leasehold property, office premises	529.9	8.7	538.6	426.0	8.7	434.7
Furniture, etc.	6.4	0.8	7.2	5.1	0.8	5.9
Total, fixed assets	*536.3*	*9.5*	*545.8*	*431.1*	*9.5*	*440.6*
Loans—						
On mortgage	1,398.7	7.6	1,406.3	1,029.2	7.6	1,036.8
On policies of the company	200.2	..	200.2	155.1	..	155.1
Other loans	41.2	4.6	45.8	39.6	4.6	44.2
Total, loans	*1,640.1*	*12.2*	*1,652.3*	*1,223.9*	*12.2*	*1,236.1*
Investments—						
Government securities—						
Australia	1,128.6	7.5	1,136.2	1,082.4	7.5	1,090.0
Other	285.9	1.8	287.8	0.8	..	0.8
Securities of local and semi-governmental bodies	386.0	2.3	388.3	303.4	1.5	304.9
Other investments	1,280.1	53.6	1,333.7	1,019.2	53.1	1,072.2
Total, investments	*3,080.6*	*65.3*	*3,146.0*	*2,405.8*	*62.1*	*2,467.9*
Cash on deposit, current account and in hand	8.4	5.0	13.4	5.5	4.8	10.3
Other assets(*a*)	154.8	15.3	170.0	121.8	14.9	136.7
Grand total	**5,420.2**	**107.3**	**5,527.5**	**4,188.1**	**103.5**	**4,291.6**

(*a*) Includes advances of premiums.

Assets held in Australia. Details of assets held in Australia for the years 1963 to 1967 are set out in the following table.

LIFE INSURANCE(*a*): ASSETS HELD IN AUSTRALIA, 1963 TO 1967
($ million)

	1963	*1964*	*1965*	*1966*	*1967*
Freehold and leasehold property	215.5	255.4	320.3	388.2	434.7
Government and municipal securities	953.2	1,043.3	1,107.8	1,253.4	1,395.7
Other investments	671.6	804.2	898.2	958.3	1,072.2
Loans on mortgage	815.3	848.7	920.2	976.2	1,036.8
Loans on companies' policies	101.5	113.5	127.4	141.8	155.1
Other loans	46.6	43.7	44.3	43.8	44.2
All other assets	104.5	109.0	121.3	137.9	152.9
Total	**2,908.2**	**3,217.8**	**3,539.5**	**3,899.9**	**4,291.6**

(*a*) Includes other classes of business.

Loans

In the following table details are given of new loans paid over by life insurance companies during each of the years ended 31 December 1964 to 1968. The information has been compiled from monthly returns furnished by each company. New loans paid over by the Government Insurance Office of New South Wales and the Queensland State Government Insurance Office are excluded. Advances of premiums are also excluded.

LIFE INSURANCE COMPANIES: NEW LOANS PAID OVER, BY CLASS OF SECURITY AND STATE OR TERRITORY, 1964 TO 1968

($'000)

	1964	*1965*	*1966*	*1967*	*1968*
Class of security—					
Mortgage of real estate	138,762	159,991	132,638	136,139	161,651
Companies' policies	24,364	30,772	32,168	34,520	41,818
Other	3,248	3,436	3,032	3,390	6,485
State or Territory(*a*)—					
New South Wales	67,104	84,268	75,309	70,026	91,761
Victoria	59,022	60,914	48,896	56,752	58,754
Queensland(*b*)	13,890	17,018	13,513	13,816	18,523
South Australia(*c*)	9,962	12,313	12,096	12,851	14,477
Western Australia	10,544	13,442	11,162	15,380	19,157
Tasmania	4,446	3,965	4,899	3,768	5,491
Australian Capital Territory	1,406	2,280	1,962	1,457	1,790
Totals(*b*)	**166,374**	**194,201**	**167,838**	**174,050**	**209,953**

(*a*) State or Territory of location of mortgage, registration of policy, or residence of borrower. (*b*) Includes Papua and New Guinea. (*c*) Includes Northern Territory.

Fire, marine and general insurance

The following statistics, which are in respect of the Australian business of companies operating in Australia and State Government insurance offices, conform to the following definitions and should be interpreted accordingly.

(*a*) Premiums represent the full amount receivable in respect of policies issued and renewed in the year, less returns, rebates and bonuses paid or credited to policy-holders during the year. They are not adjusted to provide for premiums unearned at the end of the year and consequently the amounts differ from 'earned premium income' appropriate to the year. When business is increasing, as in recent years, premiums receivable (as shown in the statistics) are greater than 'earned premium income' appropriate to the year. The converse applies when business is declining.

(*b*) Claims or losses include provision for outstanding claims and represent claims or losses incurred in the year. Salvage and other amounts recoverable have been deducted.

(*c*) Contributions to fire brigades, commission and agents' charges, and expenses of management represent mainly charges paid during the year.

(*d*) Taxation represents mainly payments made during the year, and includes income tax, pay-roll tax, licence fees, stamp duty (where paid by the company), etc. Income tax paid during the year is based on the income of earlier years.

The figures relate to selected items of statistics and are not construable as 'Profit and Loss' statements or 'Revenue Accounts'.

In cases where the business is underwritten in one State and the risk is situated in another, the business is included in the State in which the policy was issued.

During 1967–68 revenue from premiums amounted to $716.6 million, and that from net interest on investments, etc. to $46.9 million, a total of $763.5 million. Expenditure on claims amounted to $470.9 million, contributions to fire brigades $17.9 million, commission and agents' charges $64.8 million, expenses of management $119.9 million, and taxation $21.4 million, a total of $694.9 million.

Premiums and claims

The following tables show the aggregate premium income less returns, rebates and bonuses, and claims or losses less amounts recoverable, for each State and for all classes of insurance other than life for the years 1963–64 to 1967–68.

FIRE, MARINE AND GENERAL INSURANCE: PREMIUMS AND CLAIMS, STATES 1963–64 TO 1967–68

($'000)

State	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
GROSS PREMIUMS, LESS RETURNS, REBATES AND BONUSES					
New South Wales(*a*)	202,817	230,787	249,616	271,514	280,197
Victoria	145,832	163,408	186,402	209,519	227,886
Queensland	60,962	65,768	71,917	75,852	81,635
South Australia	41,201	44,772	49,433	55,413	59,151
Western Australia	30,025	33,079	37,570	43,330	50,296
Tasmania	12,248	13,567	14,703	15,915	17,413
Total	**493,086**	**551,380**	**609,641**	**671,544**	**716,579**
GROSS CLAIMS OR LOSSES, LESS AMOUNTS RECOVERABLE					
New South Wales(*a*)	141,481	159,152	163,976	181,881	198,209
Victoria	88,977	102,444	117,228	127,833	142,374
Queensland	44,189	40,210	43,911	45,710	52,269
South Australia	20,988	24,745	27,843	30,250	29,536
Western Australia	19,301	20,529	22,812	27,761	31,654
Tasmania	6,664	7,854	9,153	16,158	16,890
Total	**321,599**	**354,933**	**384,924**	**429,593**	**470,933**

(*a*) Excludes workers' compensation insurance in coal-mining industry in New South Wales.

FIRE, MARINE AND GENERAL INSURANCE: PREMIUMS AND CLAIMS, BY PRINCIPAL CLASS OF RISK, AUSTRALIA, 1963-64 TO 1967-68

($'000)

Class of risk	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
GROSS PREMIUMS, LESS RETURNS, REBATES AND BONUSES					
Fire	78,881	81,664	85,167	91,144	97,983
Householders' comprehensive	29,827	33,357	37,233	41,747	47,581
Employers' liability and workers' compensation(*a*)	95,783	114,506	138,412	144,444	142,964
Motor vehicle—					
Compulsory third party	68,388	74,974	81,324	90,002	100,383
Other	134,241	151,478	166,106	183,367	193,834
Marine	21,203	23,373	24,317	26,473	28,899
Personal accident	15,736	18,071	19,576	22,908	25,327
All other	49,027	53,958	57,509	71,460	79,607
Total	**493,086**	**551,380**	**609,641**	**671,544**	**716,579**
GROSS CLAIMS OR LOSSES, LESS AMOUNTS RECOVERABLE					
Fire	32,973	30,563	32,650	36,623	44,119
Householders' comprehensive	7,302	8,332	10,286	13,629	15,260
Employers' liability and workers' compensation(*a*)	76,006	83,203	90,544	95,839	100,381
Motor vehicle—					
Compulsory third party	64,879	71,013	77,153	94,014	111,189
Other	97,752	113,356	118,292	124,581	133,653
Marine	10,509	12,604	14,775	14,715	16,712
Personal accident	7,225	8,158	9,445	10,343	10,423
All other	24,954	27,706	31,781	39,850	39,197
Total	**321,599**	**354,933**	**384,924**	**429,593**	**470,933**

(*a*) Excludes workers' compensation insurance in coal-mining industry in New South Wales.

Export Payments Insurance Corporation

The Export Payments Insurance Corporation was established under the *Export Payments Insurance Corporation Act* 1956 to provide exporters with insurance against risks associated with overseas trade which are not usually acceptable to commercial insurers, and to give certain guarantees in connection with that trade. The Corporation commenced business in 1957. Where the Corporation is not in a position to accept business on its commercial account it may be authorised under its statute to provide insurance facilities on the Commonwealth Government's account in the national interest. *See also* the chapter Overseas Transactions, pages 311–2.

EXPORT PAYMENTS INSURANCE CORPORATION: BUSINESS, 1963-64 TO 1967-68

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Commercial business—					
Number of policy holders	436	509	559	613	692
	$'000	$'000	$'000	$'000	$'000
Face value of policies current	127,492	160,424	180,700	238,271	271,076
Maximum contingent liability	66,671	83,164	93,801	123,589	141,154
Premium income	329	387	463	598	608
Operating costs	200	233	259	348	351
Claims paid (gross)	89	321	325	446	888
Recoveries	24	72	83	111	591
Underwriting reserve	753	785	955	1,126	1,420
National interest and warehousing business–					
Number of policy holders	1	2	4	4	5
	$'000	$'000	$'000	$'000	$'000
Face value of policies current	2,594	2,608	2,661	1,932	2,278
Maximum contingent liability	2,142	2,156	2,206	1,742	2,007
Overseas investment insurance—					
Number of policies	..	..	..	15	29
				$'000	$'000
Face value of policies	..	..	..	4,699	12,097
Maximum contingent liability	..	..	..	4,229	10,887

INSTALMENT CREDIT FOR RETAIL SALES

Information relating to instalment credit for retail sales in Australia is given in the following tables. Information in more detail may be found in the annual bulletin *Insurance and Other Private Finance* and in the monthly and quarterly statements relating to instalment credit for retail sales issued by this Bureau (*see* beginning of chapter).

The statistics cover operations of all types of instalment credit schemes which relate primarily to the financing of retail sales of goods, whether the credit is advanced by a retail business or by a non-retail finance business. In general, the term 'instalment credit' is defined as relating to schemes in which repayment is made by regular pre-determined instalments. Types of schemes covered include hire purchase, time payment, budget account, and personal loan schemes which relate primarily to the financing of retail sales of goods. In these statistics the term 'retail sales' relates not only to retail sales by retail establishments coming within the scope of the Censuses of Retail Establishments conducted periodically by this Bureau, but includes also other sales of goods to final purchasers (e.g. plant and machinery).

Figures for amounts financed *exclude* interest, hiring charges, insurance, etc. Figures for balances outstanding and collections *include* interest, hiring charges, insurance, etc. Details are not available of these charges or of other items (e.g. rebates allowed for early payments, late payment charges, bad debts written off) which affect the reconciliation of the three main instalment credit series—amount financed, collections, and balances outstanding.

Statistics of amounts financed are classified by type of goods, defined as follows: *motor vehicles* (new and used separately)—motor cars and motor cycles, commercial vehicles, tractors, caravans, trailers, motor parts and accessories, etc.; *plant and machinery*—farm machinery and implements, earth-moving equipment, aircraft, industrial plant and machinery, business machines and equipment (including commercial refrigeration equipment), etc.; *household and personal goods*—furniture, furnishings and floor coverings, domestic refrigerators, electrical goods, radios, television, musical instruments, bicycles, motor mowers, clothing, etc.

Further explanatory detail on these series may be found in the bulletin and statements referred to on page 675.

Total instalment credit, by type of business

The following table gives separate particulars of the instalment credit transactions of retail businesses and non-retail finance businesses for the years 1963–64 to 1967–68.

INSTALMENT CREDIT FOR RETAIL SALES, BY TYPE OF BUSINESS: AMOUNT FINANCED, BY COMMODITY GROUP, COLLECTIONS, AND BALANCES OUTSTANDING, AUSTRALIA, 1963–64 TO 1967–68

($ million)

Year	*Amount financed during year*					*Collections during year*	*Balances outstanding at end of year*
	Motor vehicles, etc.		*Plant and machinery*	*Household and personal goods*	*Total*		
	New	*Used*					
Retail businesses—							
1963–64	10.9	11.7	3.1	297.9	323.7	380.0	416.7
1964–65	11.1	10.8	2.6	287.2	311.8	379.9	395.6
1965–66	9.9	9.4	3.1	259.4	281.8	355.4	360.3
1966–67	11.2	8.7	3.7	254.2	277.8	338.5	339.3
1967–68	12.0	8.9	3.4	265.1	289.4	335.2	337.3
Non-retail finance businesses—							
1963–64	252.7	254.3	52.9	84.0	644.0	703.1	939.2
1964–65	288.7	272.2	65.4	87.0	713.3	766.9	1,055.0
1965–66	271.3	252.3	69.6	83.5	676.7	822.1	1,074.0
1966–67	274.5	267.5	83.5	84.5	710.0	854.1	1,103.3
1967–68	339.5	308.0	93.6	88.1	829.2	907.2	1,237.4
All businesses—							
1963–64	263.6	266.0	56.1	382.0	967.6	1,083.1	1,355.9
1964–65	299.9	283.0	68.0	374.2	1,025.0	1,146.8	1,450.5
1965–66	281.2	261.8	72.7	342.9	958.6	1,177.5	1,434.3
1966–67	285.8	276.2	87.2	338.7	987.8	1,192.6	1,442.6
1967–68	351.6	316.8	97.0	353.2	1,118.6	1,242.4	1,574.7

Total instalment credit, by type of credit

In the following table particulars are given for retail businesses and non-retail finance businesses combined, classified by type of instalment credit, for the years 1963–64 to 1967–68.

INSTALMENT CREDIT FOR RETAIL SALES, BY TYPE OF CREDIT: AMOUNT FINANCED, BY COMMODITY GROUP, AND BALANCES OUTSTANDING AUSTRALIA, 1963-64 TO 1967-68

($ million)

Year	*Amount financed during year*				
	Motor vehicles, etc.	*Plant and machinery*	*Household and personal goods*	*Total*	*Balances outstanding at end of year*
Hire purchase—					
1963–64	461.0	55.0	173.0	689.0	1,061.6
1964–65	459.7	64.6	163.9	688.2	1,079.6
1965–66	410.8	67.2	134.9	612.9	1,029.6
1966–67	406.0	80.1	129.4	615.5	996.3
1967–68	430.8	84.2	133.8	648.9	1,028.3
Other instalment credit—					
1963–64	68.6	1.1	208.9	278.6	294.3
1964–65	123.2	3.4	210.3	336.9	371.0
1965–66	132.2	5.5	208.0	345.7	404.7
1966–67	156.0	7.2	209.2	372.4	446.3
1967–68	237.6	12.7	219.4	469.7	546.4
Total instalment credit—					
1963–64	529.6	56.1	382.0	967.6	1,355.9
1964–65	582.9	68.0	374.2	1,025.0	1,450.5
1965–66	543.0	72.7	342.9	958.6	1,434.3
1966–67	561.9	87.2	338.7	987.8	1,442.6
1967–68	668.4	97.0	353.2	1,118.6	1,574.7

Amount financed, by type of credit

Classifications of amount financed on new retail agreements, by type of instalment credit and by State, are given in the following tables.

INSTALMENT CREDIT FOR RETAIL SALES: AMOUNT FINANCED BY TYPE OF CREDIT, STATES, 1963-64 TO 1967-68

($ million)

Year	*N.S.W. (a)*	*Vic.*	*Qld*	*S.A. (b)*	*W.A.*	*Tas.*	*Aust.*
Hire purchase—							
1963–64	282.5	151.3	115.1	56.0	60.8	23.3	689.0
1964–65	299.1	136.4	110.8	57.4	60.4	24.1	688.2
1965–66	264.7	113.3	94.9	48.1	67.1	24.8	612.9
1966–67	273.5	107.9	95.3	41.6	71.5	25.7	615.5
1967–68	305.5	112.3	86.6	33.5	82.8	28.2	648.9
Other instalment credit—							
1963–64	117.5	82.6	33.5	25.8	14.1	5.1	278.6
1964–65	109.5	118.7	51.5	36.8	15.2	5.2	336.9
1965–66	109.2	121.5	53.9	40.4	15.9	4.8	345.7
1966–67	112.7	130.0	57.9	40.9	25.9	4.9	372.4
1967–68	124.0	158.0	90.2	56.6	35.0	6.0	469.7
Total instalment credit—							
1963–64	400.0	233.9	148.6	81.8	74.9	28.4	967.6
1964–65	408.5	255.2	162.3	94.1	75.6	29.3	1,025.0
1965–66	374.0	234.8	148.8	88.5	83.1	29.5	958.6
1966–67	386.2	237.9	153.2	82.5	97.4	30.6	987.8
1967–68	429.4	270.4	176.8	90.1	117.7	34.2	1,118.6

(*a*) Includes Australian Capital Territory. (*b*) Includes Northern Territory.

Amount financed, by type of credit and commodity group

The details shown for 1967–68 in the preceding table are classified by commodity groups below.

INSTALMENT CREDIT FOR RETAIL SALES: AMOUNT FINANCED BY TYPE OF CREDIT AND COMMODITY GROUP, STATES, 1967-68

($ million)

Commodity group	*N.S.W. (a)*	*Vic.*	*Qld*	*S.A. (b)*	*W.A.*	*Tas.*	*Aust.*
Hire purchase—							
Motor vehicles, tractors, etc.	233.7	56.8	45.6	19.0	55.6	20.1	430.8
Plant and machinery	33.5	16.4	13.2	4.1	13.8	3.2	84.2
Household and personal goods	38.3	39.1	27.8	10.4	13.3	4.9	133.8
Total hire purchase	*305.5*	*112.3*	*86.6*	*33.5*	*82.8*	*28.2*	*648.9*
Other instalment credit—							
Motor vehicles, tractors, etc.	10.5	106.9	61.0	38.0	19.1	2.0	237.6
Plant and machinery	0.8	1.5	5.2	1.0	4.1	0.1	12.7
Household and personal goods	112.7	49.6	23.9	17.5	11.8	3.9	219.4
Total other instalment credit	*124.0*	*158.0*	*90.2*	*56.6*	*35.0*	*6.0*	*469.7*
Total instalment credit—							
Motor vehicles, tractors, etc.	244.1	163.7	106.7	57.0	74.7	22.2	668.4
Plant and machinery	34.4	18.0	18.4	5.1	17.9	3.3	97.0
Household and personal goods	150.9	88.7	51.7	28.0	25.1	8.8	353.2
Total instalment credit	**429.4**	**270.4**	**176.8**	**90.1**	**117.7**	**34.2**	**1,118.6**

(*a*) Includes Australian Capital Territory. (*b*) Includes Northern Territory.

New hire purchase agreements—averages

The following are some additional particulars relating to new hire purchase agreements made during 1967–68.

NEW HIRE PURCHASE AGREEMENTS: AVERAGE VALUE AND AMOUNT AND PROPORTION FINANCED, BY COMMODITY GROUP, AUSTRALIA, 1967-68

Commodity group	*Average value of goods purchased per agreement*	*Average amount financed per agreement*	*Average proportion financed*
	$	$	Per cent
Motor vehicles, tractors, etc.	1,729	1,177	68
Plant and machinery	3,054	2,088	68
Household and personal goods	198	161	81
All groups	**740**	**521**	**70**

Balances outstanding, by type of credit

Details of the balances outstanding on retail agreements at 30 June 1964 to 1968 are given in the following table.

INSTALMENT CREDIT FOR RETAIL SALES: BALANCES OUTSTANDING BY TYPE OF CREDIT, STATES, 30 JUNE 1964 TO 1968

($ million)

30 June—	*N.S.W. (a)*	*Vic.*	*Qld*	*S.A. (b)*	*W.A.*	*Tas.*	*Aust.*
Hire purchase—							
1964	441.0	240.6	166.7	87.4	91.5	34.4	1,061.6
1965	469.4	215.2	173.3	91.9	93.2	36.5	1,079.6
1966	452.6	190.0	165.8	84.5	98.7	37.9	1,029.6
1967	446.3	175.1	158.8	75.8	101.1	39.2	996.3
1968	477.5	174.4	148.9	65.6	119.9	42.0	1,028.3
Other instalment credit—							
1964	106.3	94.0	34.6	34.4	17.3	7.9	294.3
1965	103.8	139.3	57.1	46.2	16.7	7.7	371.0
1966	107.4	154.5	66.0	52.8	16.8	7.2	404.7
1967	116.3	165.1	75.4	57.1	25.7	6.7	446.3
1968	130.8	199.7	103.8	72.7	32.2	7.2	546.4
Total instalment credit—							
1964	547.4	334.6	201.3	121.7	108.9	42.3	1,355.9
1965	573.3	354.5	230.5	138.1	109.9	44.3	1,450.5
1966	559.9	344.5	231.8	137.3	115.5	45.2	1,434.3
1967	562.6	340.3	234.2	132.9	126.8	45.8	1,442.6
1968	608.3	374.0	252.8	138.3	152.1	49.2	1,574.7

(*a*) Includes Australian Capital Territory. (*b*) Includes Northern Territory.

NEW CAPITAL RAISINGS BY COMPANIES IN AUSTRALIA

Information relating to capital raised by companies in Australia is given in the following tables. More detailed information may be found in the annual bulletin *Insurance and Other Private Finance* and in quarterly bulletins dealing with capital raisings (*see* beginning of chapter).

The statistics (the collection of which commenced in July 1954) relate to capital raised by companies through issues of shares, and in the case of companies listed on stock exchanges, through the issue of debentures, notes and similar securities and the acceptance of deposits, and in the case of unlisted companies, by way of loans secured over the entire assets of the company. Capital obtained by way of bank overdraft or bank loans, trade credit, temporary advances, and loans secured over part only of the assets of the company is not included. Totally unsecured loans are included in the case of listed companies, but are excluded in the case of unlisted companies.

Separate statistics are given for listed and unlisted companies. Listed companies are companies incorporated in Australia or the Australian territories and listed on one or more of the Australian stock exchanges. All other companies incorporated in Australia, including subsidiaries of listed companies, are classified as unlisted companies. Companies incorporated overseas, whether listed on an Australian stock exchange or not, are excluded from the statistics of share issues. However, subsidiaries of overseas companies, if incorporated in Australia, are included in the statistics of share issues. The statistics of new capital raised through issues of debentures, notes, etc., and the acceptance of deposits, include, in addition to capital raised by companies incorporated in Australia (including subsidiaries of overseas companies), capital raised in this way from Australian sources by overseas public companies through their Australian offices.

The following are explanatory notes relating to some of the items shown in the tables.

New money. This is the net amount of cash transferred from the investing public to the companies. For this purpose the 'investing public' includes banks and life insurance companies (except when subscribing to issues by associated companies) and government and private superannuation funds, but excludes other government agencies. Subscriptions by associated companies, whether local or overseas, are excluded. In the tables which follow the amount of new money is obtained by deducting from the total cash raised the 'amount not involving new money'.

Amounts not involving new money. These amounts include cash subscriptions received by issuing companies from associated companies. Such subscriptions represent inter-company transfers only, and do not involve a receipt of funds from the 'investing public'. Also included are amounts which, although subscribed by the 'investing public' (i.e. subscribers other than 'associated companies'), are not retained by the issuing company or its associates, but are used to redeem shares, debentures or unsecured notes, etc., or are used to purchase from individuals existing shares, debentures, etc., in other companies, including existing shares, etc., in associated and subsidiary companies. The funds used in this way are thus returned to another section of the 'investing public' and do not represent a *net* transfer of cash from the 'investing public' to the companies. (Besides these purchases of existing shares, etc., from individuals, purchases of existing shares, etc., from companies other than associates of the issuing company might also be included in this item, but the amounts involved are small and separate details have not been collected.)

Companies listed on stock exchanges

Details of new capital raised through issues of shares, debentures, or registered notes, or through accepting deposits are given in the following table for each of the years 1963–64 to 1967–68. Figures are subject to revision in some instances.

LISTED AUSTRALIAN COMPANIES(*a*): NEW CAPITAL RAISED THROUGH ISSUES OF SHARES, DEBENTURES, OR REGISTERED NOTES, ETC.(*b*), OR ACCEPTING DEPOSITS(*c*), 1963-64 TO 1967-68

($ million)

Year	Share capital						Debentures, registered notes and deposits		
	Value of issues commenced	Non-cash issues commenced (*d*)	Cash issues commenced	Cash raised during period (*e*)	Amounts not involving new money	New money	Total amount raised (*f*)	Amounts not involving new money (*f*)	New money
1963–64	260.8	119.3	141.4	169.2	42.8	126.4	907.7	746.8	160.9
1964–65	394.4	136.6	257.9	209.2	62.3	146.9	1,074.5	906.0	168.5
1965–66	292.1	85.6	206.3	232.6	61.5	171.3	990.7	840.5	150.2
1966–67	313.7	148.0	165.8	151.6	39.2	112.4	1,099.4	898.9	200.6
1967–68	280.7	79.3	201.5	169.8	47.2	122.6	1,394.5	1,045.7	348.7

(*a*) Includes companies incorporated in the Australian Territories. (*b*) Includes convertible notes. (*c*) Deposits accepted by banks, life insurance companies, pastoral companies and building societies, and loans to authorised dealers in the short-term money market are not included. (*d*) Includes bonus issues, conversion issues, issues in exchange for existing shares, etc. (*e*) Amounts paid up on issues commenced during the year plus calls on issues commenced in earlier years. (*f*) Includes conversions, renewals, etc.

Companies not listed on stock exchanges

Details of new capital raised by unlisted companies through issues of shares and loans secured by charges over the companies' entire assets are given in the following table for each of the years 1963–64 to 1967–68.

UNLISTED COMPANIES(*a*): NEW CAPITAL RAISED THROUGH ISSUES OF SHARES AND LOANS SECURED BY CHARGES OVER THE COMPANIES' ENTIRE ASSETS, 1963-64 TO 1967-68

($ million)

Year	Share capital						Loans secured by charges over the companies' entire assets		
	Value of issues commenced	Non-cash issues commenced (*b*)	Cash issues commenced	Cash raised during period (*c*)	Amounts not involving new money	New money	Total amount raised (*d*)	Amounts not involving new money (*d*)	New money
1963–64	432.3	222.5	209.9	211.6	163.2	48.4	68.7	46.1	22.6
1964–65	563.5	303.1	260.5	233.9	182.2	51.7	65.3	40.1	25.2
1965–66	455.3	260.1	195.4	216.3	165.5	50.8	63.8	40.7	23.1
1966–67	392.7	178.8	214.0	150.6	110.2	40.4	74.2	37.9	36.4
1967–68	400.1	190.9	209.1	209.2	158.4	50.8	66.5	48.2	18.1

(*a*) Includes companies incorporated in the Northern Territory. (*b*) Includes bonus issues, conversion issues, issues in exchange for existing shares, etc. (*c*) Amounts paid up on issues commenced during year plus calls on issues commenced in previous years. (*d*) Includes conversions, renewals, etc.

Listed and unlisted companies—new money raised, classified by industry group

A summary of new money raised by listed and unlisted companies during each of the years 1963–64 to 1967–68, as shown in the preceding tables, is given below, together with a classification by industry groups of the amounts raised. Figures are subject to revision in some instances.

LISTED AND UNLISTED COMPANIES: NEW MONEY RAISED, BY INDUSTRY GROUP, 1963-64 TO 1967-68

($ million)

Year	*Companies listed on stock exchanges*			*Companies not listed on stock exchanges*			
	Share capital (a)	*Debentures, registered notes and deposits (b)*	*Total*	*Share capital (a)*	*Secured loans (c)*	*Total*	*Grand total*
Manufacturing—							
1963–64 . .	31.9	12.9	44.8	10.0	18.3	28.3	73.1
1964–65 . . .	78.3	27.5	105.8	12.4	19.8	32.2	138.0
1965–66 . . .	94.5	79.9	174.4	13.6	12.8	26.4	200.8
1966–67 . . .	28.3	101.7	130.0	8.8	15.7	24.5	154.5
1967–68 . . .	24.4	82.4	106.8	12.7	7.8	20.5	127.3
Finance and property(*b*)—							
1963–64 . . .	21.8	89.9	111.7	15.5	2.7	18.2	129.9
1964–65 . . .	12.8	119.8	132.6	11.4	1.8	13.2	145.8
1965–66 . . .	25.3	63.1	88.4	9.4	4.6	14.0	102.4
1966–67 . . .	4.7	94.9	99.6	6.4	7.4	13.8	113.4
1967–68 . . .	15.6	255.4	271.0	8.1	6.2	14.3	285.3
Commerce—							
1963–64 . . .	44.3	47.7	92.0	7.8	0.6	8.4	100.4
1964–65 . . .	23.0	4.8	27.8	9.6	0.6	10.2	38.0
1965–66 . . .	25.0	(*d*)−3.7	21.3	10.1	1.6	11.7	33.0
1966–67 . . .	32.1	(*d*)−0.6	31.5	8.5	0.7	9.2	40.7
1967–68 . . .	7.9	4.4	12.3	8.9	0.8	9.7	22.0
Other industries—							
1963–64 . . .	28.3	10.1	38.4	11.6	1.3	12.9	51.3
1964–65 . . .	32.7	16.5	49.2	15.1	3.1	18.2	67.4
1965–66 . . .	26.5	11.0	37.5	14.5	4.1	18.6	56.1
1966–67 . . .	47.2	4.6	51.8	13.7	12.7	26.4	78.2
1967–68 . . .	75.0	6.6	81.6	17.6	3.4	21.0	102.6
All industries—				(*e*)		(*e*)	(*e*)
1963–64 . . .	126.4	160.9	287.3	48.4	22.6	71.0	358.3
1964–65 . . .	146.9	168.5	315.4	51.7	25.2	76.9	392.3
1965–66 . . .	171.3	150.2	321.5	50.8	23.1	73.9	395.4
1966–67 . . .	112.4	200.6	313.0	40.4	36.4	76.8	389.8
1967–68 . . .	122.6	348.7	471.3	50.8	18.1	68.9	540.2

(*a*) Includes preference shares. (*b*) Excludes deposits accepted by banks, insurance companies, pastoral companies and building societies, and loans to authorised dealers in the short-term money market. (*c*) Includes only loans which are secured by charges over the companies' entire assets. (*d*) Excess of repayments over receipts of new money. (*e*) Small share issues of less than $2,000 for which returns have not been collected have not been included in the industrial classification but are included in All industries.

UNIT TRUSTS, LAND TRUSTS AND MUTUAL FUNDS

Statistics of operations of unit trusts, land trusts and mutual funds for the years 1963–64 to 1967–68 and for the quarters ended March 1968 to March 1969 are shown below. Details of superannuation funds conducted by unit trust management companies are not included in these tables.

Transactions of trusts and funds

TRUSTS AND FUNDS: TRANSACTIONS, YEARS 1963-64 TO 1967-68 AND QUARTERS MARCH 1968 TO MARCH 1969

($ million)

	Cash transactions—trust units and fund shares		*Purchases and sales of investments(a)*	
Period	*Total amount received (b)*	*Total amount paid (c)*	*Purchases (d)*	*Sales (e)*
Year—				
1963–64 . . .	44.9	20.4	35.2	10.6
1964–65 . . .	36.0	22.6	31.3	18.8
1965–66 . . .	25.2	19.7	23.9	20.0
1966–67 . . .	20.2	21.1	20.5	17.7
1967–68 . . .	30.9	35.1	33.0	40.8
Quarter—				
March 1968 . .	5.5	8.6	6.3	9.3
June 1968 . .	10.7	12.8	11.5	14.7
September 1968 .	10.1	14.0	12.6	16.1
December 1968 .	10.2	8.6	11.9	13.3
March 1969 . .	9.0	10.0	10.5	12.6

(*a*) Commonwealth Government, local and semi-governmental authority securities, shares, debentures, unsecured notes, loans, deposits on term or notice of three months or longer, land and buildings, etc. (*b*) For trust units and fund shares issued. Includes re-issues and new issues. Includes fees and expenses. (*c*) For trust units and fund shares repurchased. Includes those units and fund shares intended for re-issue. (*d*) Payments for assets acquired during period. Includes brokerage and stamp duty. (*e*) Receipts for assets sold or redeemed during period. Excludes brokerage and stamp duty.

Analysis of purchases and sales of investments

TRUSTS AND FUNDS: ANALYSIS OF PURCHASES AND SALES OF INVESTMENTS, 1963-64 TO 1967-68

($ million)

Year	*Shares (incl. preference shares)*	*Debentures, unsecured notes, deposits (a)*	*Cwlth Govt local and semi-govt authority securities*	*Other (b)*	*Total*
Purchases—					
1963–64 . .	25.0	6.8	0.1	3.2	35.2
1964–65 . .	19.3	6.1	0.1	6.0	31.3
1965–66 . .	12.6	3.8	..	7.4	23.9
1966–67 . .	7.6	5.3	..	7.6	20.5
1967–68 . .	13.2	7.3	..	12.5	33.0
Sales—					
1963–64 . .	7.7	1.9	0.1	0.9	10.6
1964–65 . .	13.7	2.7	0.1	2.3	18.8
1965–66 . .	14.1	2.7	0.1	3.1	20.0
1966–67 . .	13.7	3.0	0.1	0.8	17.7
1967–68 . .	34.7	3.8	..	2.3	40.8

(*a*) Excludes cash on hand and at bank, loans to authorised dealers in the short-term money market, and other deposits under three months' term or notice. (*b*) Includes land and buildings, mortgages on land and buildings, and other investments.

Market value of trusts and funds, and cash and short-term deposits of trusts and funds

TRUSTS AND FUNDS: TOTAL MARKET VALUE AND CASH AND SHORT-TERM DEPOSITS, JUNE 1964 TO MARCH 1969

($ million)

End of—	Total market value of trusts and funds (a)	Cash and short-term deposits		
		Cash (b)	Short-term deposits (c)	Total
June—				
1964	249.8	1.6	6.4	8.0
1965	222.2	2.0	5.6	7.6
1966	225.2	1.9	5.5	7.4
1967	224.4	1.6	2.8	4.4
1968	267.5	1.1	5.1	6.2
Quarter—				
March 1968	247.6	0.7	3.9	4.6
June 1968	267.5	1.1	5.1	6.2
September 1968	263.3	0.9	4.2	5.2
December 1968	275.1	2.6	5.9	8.5
March 1969	281.1	4.0	5.0	9.0

(a) Includes value of land trusts at valuation. (b) Includes cash on hand and at bank. (c) Includes loans to authorised dealers in the short-term money market and other deposits under three months' term or notice.

PASTORAL FINANCE COMPANIES

Rural advances

The following table is derived from returns supplied to the Reserve Bank by major pastoral finance companies and shows the total rural advances outstanding at the end of June 1964 to 1968.

PASTORAL FINANCE COMPANIES: RURAL ADVANCES(a), STATES JUNE 1964 TO 1968

(*Source:* Reserve Bank of Australia)

($ million)

End of—	N.S.W.	Vic.	Qld	S.A.	W.A. and Tas.	Total
June—						
1964	64.1	39.0	51.9	36.3	37.1	228.3
1965	66.6	43.9	58.5	42.8	47.1	258.9
1966	62.4	40.9	55.6	44.3	46.6	249.9
1967	68.4	50.2	58.8	50.1	57.9	285.5
1968	72.2	54.8	63.5	61.0	62.9	314.4

(a) Compiled from returns supplied by major pastoral finance companies. Advances are classified according to the location of the branch holding the advance, which in some cases may differ from the State of residence of the borrower. The statistics refer to the total advances outstanding at the end of the month shown.

Liabilities and assets

PASTORAL FINANCE COMPANIES: LIABILITIES AND ASSETS(*a*) JUNE 1963 TO DECEMBER 1968

(*Source:* Reserve Bank of Australia)

($ million)

LIABILITIES

			Debentures, notes and deposits					
End of—	*Balances due to banks*	*Clients' credit balances*	*Maturing within twelve months*	*Other*	*Other outside liabilities*	*Share-holders' funds*	*Overseas liabilities*	*Total liabilities/ assets*
June—								
1963 . .	48.1	46.3	18.9	15.7	88.5	112.1	104.9	434.6
1964 . .	49.6	51.6	18.9	20.0	98.1	130.3	107.2	475.8
1965 . .	74.5	42.9	19.9	22.5	86.6	138.0	114.1	498.6
1966 . .	57.3	39.1	27.3	24.1	95.6	145.7	128.4	517.5
1967 . .	68.5	41.8	39.3	29.8	94.8	154.2	131.9	560.2
1968 . .	94.4	34.4	51.9	40.0	89.9	162.5	133.2	606.1
December 1968	82.7	36.3	63.1	43.0	112.0	167.5	137.8	642.4

ASSETS

					Advances and sundry debtors				
End of—	*Cash and deposits with banks*	*Loans to authorised money market dealers*	*Other short-term assets (b)*	*Cwlth Govt securities*	*Rural*	*Other*	*Stocks*	*Fixed assets*	*Other assets*
June—									
1963 . .	5.6	2.1	10.2	14.6	213.7	22.7	29.2	117.3	19.1
1964 . .	10.7	1.9	8.8	20.0	228.3	23.6	32.1	124.5	25.8
1965 . .	5.4	1.1	1.0	14.0	258.9	24.3	35.2	133.5	25.3
1966 . .	6.3	0.9	4.5	29.0	249.9	28.0	34.9	140.2	23.8
1967 . .	7.6	0.4	1.9	33.3	285.5	25.7	37.8	145.8	22.3
1968 . .	8.6	1.7	1.3	35.7	314.4	29.9	40.4	148.4	25.7
December 1968	13.2	2.6	2.3	51.6	320.2	34.2	40.5	150.1	27.8

(*a*) Compiled from returns supplied by major pastoral finance companies. (*b*) Excludes Commonwealth Government securities.

RURAL DEBT

Major sources of credit for rural purposes include banks, Commonwealth and State government financial agencies, pastoral finance companies, and life insurance companies. The following table shows the estimated rural debt to these lenders.

ESTIMATED RURAL DEBT TO SPECIFIED LENDERS, 30 JUNE 1964 TO 1968
(*Source:* Reserve Bank of Australia)
($ million)

Lender	30 June— 1964	1965	1966	1967	1968
Major trading banks	514	584	650	751	918
Ex-service settlement	103	104	99	92	88
Other government, including State banks and State savings banks	191	216	245	274	331
Pastoral finance companies	228	258	250	285	314
Commonwealth Development Bank	55	72	92	120	143
Life insurance companies	56	66	75	81	97
Total	**1,152**	**1,300**	**1,411**	**1,603**	**1,891**

In addition, credit is supplied to the rural sector by finance companies, merchants, co-operative producer organisations, and by private lenders and investors, the most noteworthy of these last-mentioned sources involving family arrangements and property vendors. No data are currently available on the extent of the outstanding debt by the rural sector to these sources.

SHORT-TERM MONEY MARKET

For some years prior to 1959 leading stockbrokers had been actively engaged in the acceptance of short-term funds against the security of government securities, but their operations were limited by the absence of suitable short-term securities and their liquidity requirements. In February 1959 the Commonwealth Bank (now the Reserve Bank) gave official status to the market by announcing that under certain conditions it would act as lender of last resort to authorised dealers in the short-term money market.

The form of organisation consists of nine companies whose functions are:

(i) to accept loans overnight, at call or for fixed periods, in minimum amounts of $50,000 and to invest these funds in Commonwealth Government securities with currencies not exceeding three years and, since March 1965, in commercial bills that had been accepted or endorsed by a trading bank; and

(ii) to engage as traders in the buying and selling of these specific classes of securities.

Dealers are required to have a minimum paid-up capital of $400,000 and a level of shareholders' funds sufficient to permit the lodgment of 'margins' with the Reserve Bank, in the form of Commonwealth Government securities, as general backing for their operations. These securities lodged as margins are required to be, on market values, equivalent to at least:

(*a*) one-half per cent of the dealer's holding of Treasury Notes;

(*b*) one per cent of the dealer's holding of Commonwealth Government securities and commercial bills maturing within one year;

(*c*) two per cent of the dealer's holding of Commonwealth Government securities maturing within one to two years; and

(*d*) four per cent of the dealer's holding of Commonwealth Government securities maturing within two to three years.

The total amount of loans a dealer may accept is determined by the Reserve Bank in relation to the level of the dealer's shareholders' funds. Under the lender of last resort arrangements the dealer may borrow from the Reserve Bank against the lodgment of securities.

Selected assets and liabilities of authorised dealers and rates of interest on loans accepted

SHORT-TERM MONEY MARKET: SELECTED LIABILITIES AND ASSETS AND INTEREST RATES OF AUTHORISED DEALERS, JUNE 1963 TO DECEMBER 1968

(*Source:* Reserve Bank of Australia)

Month	*Liabilities to clients*			*Holdings of Cwlth Govt securities (at face value)*	*Commercial bills*	*Interest rates on loans accepted during month*				*Weighted average interest rate on loans outstanding (a)*
						At call		*For fixed periods*		
	All cheque-paying banks	*Other clients*	*Total*			*Minimum per cent per annum*	*Maximum per cent per annum*	*Minimum per cent per annum*	*Maximum per cent per annum*	*per cent per annum*
	Average of weekly figures—($ million)									
June—										
1963	58.0	209.1	267.1	286.8	..	2.00	4.25	3.13	4.25	3.75
1964	67.3	253.6	320.8	341.2	..	1.50	4.50	3.38	4.50	3.71
1965	93.7	219.0	312.7	343.4	7.6	1.50	6.00	2.00	5.53	4.16
1966	74.8	275.4	350.2	373.3	25.2	3.00	6.10	4.25	5.80	4.73
1967	88.8	367.6	456.4	467.7	32.8	2.00	6.50	3.00	5.50	4.46
1968—										
January	111.1	361.6	472.7	481.8	16.0	1.00	6.50	2.00	5.40	3.88
February	70.9	429.0	499.9	507.2	15.9	1.00	6.50	2.00	5.40	4.31
March	75.8	452.0	527.8	536.0	18.8	1.00	6.50	3.25	5.75	4.10
April	73.5	419.6	493.1	493.4	25.9	2.00	6.50	3.50	5.50	4.24
May	76.3	414.4	490.7	494.9	30.2	1.00	6.50	3.00	5.50	4.23
June	87.7	406.5	494.2	491.3	35.7	3.00	6.75	3.75	5.40	4.29
July	90.2	408.8	499.0	487.1	34.0	1.00	6.50	3.75	5.50	4.19
August	98.5	421.7	520.2	514.3	28.5	3.00	6.50	3.50	5.75	4.16
September	109.6	416.1	525.7	538.5	29.6	0.50	6.50	3.25	5.75	4.07
October	105.4	422.0	527.4	546.1	19.9	0.50	6.25	2.00	6.00	4.18
November	120.9	424.0	544.9	539.9	24.6	1.00	7.00	2.50	5.25	3.83
December(*b*)	120.8	416.7	537.5	544.3	23.0	1.00	6.25	3.25	6.00	4.18

(a) Average of weekly figures commencing October 1963; previously as at last Wednesday. (*b*) Excludes one Wednesday.

Authorised dealers' liabilities classified by type of client

SHORT-TERM MONEY MARKET: AUTHORISED DEALERS' LIABILITIES BY TYPE OF CLIENT(*a*), 30 JUNE 1967 AND 1968 AND 31 DECEMBER 1968

(*Source:* Reserve Bank of Australia)

($ million)

Client	*30 June 1967*	*30 June 1968*	*31 December 1968*
All cheque-paying banks	121.5	117.6	179.3
Savings banks	56.2	26.5	21.3
Insurance offices	10.8	20.1	23.0
Superannuation, pension and provident funds	11.7	4.6	4.8
Hire purchase and other instalment credit companies	5.9	2.8	6.1
Companies, n.e.i.	120.2	156.8	138.8
Commonwealth and State Governments	57.4	78.1	43.1
Local government and semi-governmental authorities, n.e.i.	56.5	72.2	66.6
All other lenders(*b*)	33.6	20.6	55.0
Total	473.7	499.3	538.0

(*a*) Compiled from returns supplied by authorised dealers in the short-term money market. Liabilities to Reserve Bank as lender of last resort are excluded. (*b*) Includes marketing boards and trustee companies.

FRIENDLY SOCIETIES, REGISTERED BUILDING SOCIETIES AND CO-OPERATIVE SOCIETIES

Friendly societies

The total membership of friendly societies in Australia is about 426,000, but as certain benefits such as medical attendance and free medicines, and in many cases funeral expenses, are granted to members' families as well as to members themselves, this figure must be more than doubled to arrive at an estimate of the number of persons who receive some direct benefit from these societies, even when due allowances are made for young and unmarried members. Legislation has conferred certain privileges on friendly societies, but, on the other hand, it insists on their registration, and it is the duty of the Registrars in the various States, prior to registering a new society, to see that its proposed rules conform to the law, and that the scale of contribution is sufficient to provide the promised benefits. Societies are obliged to forward to the Registrar annual returns about their membership and their finances, and reports dealing with the returns received are published in most of the States.

Societies, members and revenue

The following table sets out the number of societies, members, etc., revenue and expenditure, and funds of registered societies for the year. More detailed information is available in the bulletin *Insurance and Other Private Finance*, and issue No. 6, 1967–68 contains particulars for the year 1966–67.

FRIENDLY SOCIETIES(*a*): SUMMARY, STATES, 1966-67

	N.S.W. (*b*)	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.* (*c*)	*Total*
Registered societies	43	129	19	14	11	8	224
Branches	1,713	1,120	415	545	249	112	4,154
Benefit members at end of year	140,261	151,765	62,641	51,001	15,964	4,936	426,568
Average benefit members during year	137,183	152,354	62,050	51,055	16,140	5,059	423,841
Members who received sick pay	n.a.	24,871	6,189	8,071	2,451	799	n.a.
Total weeks sick pay granted	n.a.	409,005	111,437	157,422	54,808	20,303	n.a.
Average weeks per member sick	n.a.	16.4	18.0	19.5	22.4	25.4	n.a.
Deaths of benefit members	n.a.	2,589	1,239	1,063	345	233	n.a.
Proportion of deaths per 1,000 members (average)	n.a.	17.0	20.0	20.8	21.4	46.1	n.a.
	$'000	$'000	$'000	$'000	$'000	$'000	$'000
Revenue—							
Entrance fees, levies and members' contributions	13.318	12,225	2,764	6.562	1,915	40	36,823
Interest, dividends and rents	1,177	1,867	459	755	148	74	4,481
All other revenue	732	163	101	673	211	17	1,897
Total revenue	*15,227*	*14,255*	*3,324*	*7,990*	*2,274*	*131*	*43,201*
Expenditure—							
Sick pay	399	549	134	188	42	18	1,329
Medical attendance and medicine	9,924	7,576	1,883	2,305	1,632	3	23,323
Sums payable at death	674	247	201	139	43	44	1,350
Administration	2,403	2,394	685	997	162	27	6,667
All other expenditure	266	620	..	3,006	124	50	4,065
Total expenditure	*13,666*	*11,386*	*2,902*	*6,635*	*2,002*	*143*	*36,734*
Funds—*Total*	*26,199*	*34,925*	*9,831*	*16,217*	*4,241*	*1,397*	*92,811*

(*a*) Excludes juvenile branches, dispensaries, medical institutes, and certain miscellaneous societies. Receipts and payments of subsidy under the Commonwealth medical and hospital benefit schemes are excluded. (*b*) Includes the Australian Capital Territory. (*c*) Year 1967.

Registered building societies

Summary

In the following table general information is given relating to the societies in each State for the year 1966–67 and to the combined States for 1965–66. The information is not exhaustive, as particulars regarding a number of organisations are not included. More detailed information is available in the mimeographed bulletin *Registered Building Societies*. Issue No. 5 contains information for the year 1966–67.

REGISTERED BUILDING SOCIETIES: SUMMARY, STATES, 1966-67 AND TOTAL, 1965-66

	1966–67(a)							*1965–66 (a)*
	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*	*Total*
Societies making returns—								
Permanent	64	35	22	5	13	4	143	132
Starr-Bowkett	93	2	3	21	1	..	120	118
Terminating(b)	2,255	1,058	409	..	158	60	3,940	3,526
Total	*2,412*	*1,095*	*434*	*26*	*172*	*64*	*4,203*	*3,776*
Shareholders	222,895	63,606	28,988	23,722	38,273	9,877	387,361	355,346
Borrowers	n.a.	61,384	27,012	6,732	13,708	6,316	n.a.	n.a.
Administrative expenses $'000	7,495	2,069	632	188	532	204	11,121	9,570
Loans paid over $'000	112,443	37,688	20,641	4,412	14,031	6,337	195,553	165,108

(a) At various balance dates within the financial year shown. (b) Co-operative housing and other terminating societies.

Liabilities and assets

REGISTERED BUILDING SOCIETIES: LIABILITIES, STATES, 1966-67 AND TOTAL, 1965-66

($'000)

	1966–67(a)						*1965–66 (a)*
State	*Investing members' funds*	*Borrowing members' funds*	*Deposits*	*Loans due to government*	*Bank overdrafts and other liabilities*	*Total liabilities*	*Total liabilities*
New South Wales	196,556	112,048	6,966	97,206	241,759	654,535	574,394
Victoria	16,023	53,883	25,949	75,556	128,404	299,816	281,749
Queensland	36,437	6,904	1,105	21,299	30,669	96,414	83,858
South Australia	10,540	..	2,202	7,712	216	20,671	18,317
Western Australia	22,231	1,674	13,443	19,231	11,003	67,582	56,618
Tasmania	10,115	734	11,550	4,183	2,532	29,113	25,904
Total	**291,902**	**175,244**	**61,216**	**225,186**	**414,583**	**1,168,131**	**1,040,840**

(a) At various balance dates within the financial year shown.

REGISTERED BUILDING SOCIETIES: ASSETS
STATES, 1966-67 AND TOTAL, 1965-66

($'000)

	1966–67(a)			*1965–66(a)*
State	*Advances on mortgage (b)*	*Other assets*	*Total assets*	*Total assets*
New South Wales	619,141	35,394	654,535	574,394
Victoria	292,702	7,113	299,816	281,749
Queensland	92,634	3,781	96,414	83,858
South Australia	19,470	1,200	20,671	18,317
Western Australia	62,689	4,893	67,582	56,618
Tasmania	27,393	1,721	29,113	25,904
Total	**1,114,029**	**54,102**	**1,168,131**	**1,040,840**

(a) *See* footnote (a) to table above. (b) Includes advances on mortgage of terminating societies which are on a gross basis. Net advances may be derived by subtracting borrowing members' funds. *See* table above.

Co-operative societies

Co-operative societies are divided into three classes: (i) those engaged in the manufacture and marketing of primary products and trade requirements; (ii) those engaged in retailing general household requirements; and (iii) those engaged in activities covered by both classes (i) and (ii). The first class may be described briefly as producers' co-operative societies and the second as consumers' co-operative societies. The particulars given for New South Wales relate to societies registered under the Co-operation Act, 1923–1967. A summary of the business of all co-operative societies for the year 1966–67 for all States is given in the following tables. Separate particulars for each of the three types of co-operative societies are given in the annual bulletin *Insurance and Other Private Finance*, and issue No. 6, 1967–68 contains details for 1966–67.

CO-OPERATIVE SOCIETIES: STATES, 1966-67

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*
SUMMARY						
Societies	365	148	810	71	74	15
Branches	n.a.	n.a.	146	n.a.	50	n.a.
Members	318,354	122,437	161,913	129,230	64,678	5,252
	$'000	$'000	$'000	$'000	$'000	$'000
Gross turnover (sales)	324,560	149,842	169,310	50,387	70,020	9,533
Other income	2,335	6,595	9,184	4,665	16,472	1,066
Total income	*326,895*	*156,437*	*178,495*	*55,053*	*86,492*	*10,599*
Total purchases	317,806	121,271	130,205	37,656	62,822	8,073
Other expenditure		31,384	39,175	14,753	20,192	2,166
Total expenditure	*317,806*	*152,654*	*169,380*	*52,408*	*83,014*	*10,240*
Rebates and bonuses	6,697	829	1,751	3,317	3,233	61
Dividends on share capital	1,773	1,063	872	429	616	52
LIABILITIES ($'000)						
Paid-up capital	35,403	21,126	24,865	7,793	9,670	1,196
Loan capital	..	6,460	16,993	12,574	34,866	1,163
Bank overdrafts	39,801	15,746	28,239	4,697	6,624	932
Accumulated profits	22,635	2,262	7,212	1,579	656	522
Reserve funds		17,800	26,951	6,275	9,576	427
Sundry creditors	48,500	15,746	23,998	4,139	6,946	1,446
Other liabilities		4,329	12,627	8,060	5,105	175
Total	**146,339**	**83,469**	**140,885**	**45,115**	**73,443**	**5,860**
ASSETS ($'000)						
Land and buildings	60,279	40,780	30,366	10,370	6,389	1,332
Machinery, plant and other fixed assets			44,743	6,561	33,805	625
Stocks	45,672	12,717	10,499	10,895	7,048	937
Sundry debtors	30,073	20,339	42,759	5,916	14,975	2,478
Cash in hand and on deposit	10,315	2,328	4,824	1,495	1,021	83
Profit and loss account		1,583	809	103	114	..
Other assets		4,721	6,885	9,775	10,090	404
Total	**146,339**	**82,469**	**140,885**	**45,115**	**73,443**	**5,860**

LOTTERIES AND BETTING

Lotteries

State Governments operate lotteries in New South Wales, Queensland, South Australia, and Western Australia. The Lotteries Commission of South Australia commenced operations on 15 May 1967. Tattersall Lotteries are operated under government licence in Victoria and also sell tickets under government licence in Tasmania and New Zealand. The statistics of sales of tickets and prizes for Victoria include sales and allotments of prizes in Tasmania and New Zealand by Tattersall of Victoria. Tasmanian Lotteries were operated under government licence until 30 September 1961, when they surrendered their licence. In general, revenue derived by the State Governments from these lotteries is used directly or indirectly to provide funds for expenditure on hospitals, charities, etc. For information as to the origin, purpose and method of payment of proceeds or taxes to State revenues *see* Year Book No. 46, page 808 and earlier issues.

Details of ticket sales, prizes allotted, and taxes paid and other net contributions to State Government revenues, relating to lotteries drawn during each of the years 1963–64 to 1967–68, are given in the following table.

LOTTERIES: VALUE OF TICKET SALES, PRIZES ALLOTTED, TAXES PAID AND OTHER NET CONTRIBUTIONS TO STATE GOVERNMENT REVENUES 1963–64 TO 1967–68

($'000)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.(a)*	*W.A.*	*Total*
TICKET SALES						
1963–64 . .	47,126	21,340	14,180	..	3,924	86,570
1964–65 . .	48,830	21,675	14,460	..	3,725	88,690
1965–66 . .	48,095	20,396	14,360	..	4,025	86,876
1966–67 . .	50,171	20,300	14,620	..	4,775	89,866
1967–68 . .	50,528	19,420	15,900	5,200	4,350	95,398
PRIZES ALLOTTED						
1963–64 . .	30,252	12,804	9,040	..	2,258	54,354
1964–65 . .	31,280	13,005	9,218	..	2,150	55,653
1965–66 . .	30,815	12,238	9,163	..	2,339	54,555
1966–67 . .	30,904	12,180	9,332	..	2,803	55,219
1967–68 . .	30,850	11,652	10,151	3,129	2,493	58,275
TAXES PAID AND OTHER NET CONTRIBUTIONS TO STATE GOVERNMENT REVENUES(*b*)						
1963–64 . .	15,550	6,608	3,818	..	1,138	27,114
1964–65 . .	15,079	6,719	3,854	..	1,151	26,803
1965–66 . .	11,217	6,294	3,588	..	1,146	22,245
1966–67 . .	11,892	6,296	3,710	..	1,317	23,215
1967–68 . .	11,809	6,020	4,006	1,603	1,236	24,675

(*a*) The Lotteries Commission of South Australia commenced operations on 15 May 1967.
(*b*) Includes grants to Tasmanian and New Zealand governments by Tattersall Lotteries in Victoria.

Betting

TOTALIZATOR INVESTMENTS AND INVESTMENTS WITH LICENSED BOOKMAKERS STATES AND AUSTRALIAN CAPITAL TERRITORY, 1963-64 TO 1967-68

($'000)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*A.C.T. (a)*	*Total*
TOTALIZATOR INVESTMENTS								
1963–64	28,600	109,245	24,585	4,748	32,069	1,260	n.a.	200,507
1964–65	41,999	142,492	33,696	4,899	38,951	1,274	1,011	264,321
1965–66	94,317	163,006	39,978	4,702	42,568	1,149	1,974	347,695
1966–67	146,084	179,490	47,339	4,749	43,077	1,174	2,567	424,480
1967–68	196,120	200,253	55,330	4,533	46,180	1,277	3,098	506,791
INVESTMENTS WITH LICENSED BOOKMAKERS(*b*)								
1963–64	238,937	154,445	107,970	57,442	20,989	28,439	n.a.	608,223
1964–65	279,389	159,723	116,797	61,045	20,434	32,612	n.a.	670,000
1965–66	267,987	160,453	118,560	55,022	20,691	32,137	n.a.	654,850
1966–67	283,346	168,381	123,506	55,740	24,817	35,091	n.a.	690,881
1967–68	283,262	172,603	131,145	49,189	27,332	42,090	n.a.	705,621

(*a*) Off-course investments only. Totalizator Agency Board commenced operating from 1 September 1964.
(*b*) Estimated from taxes on betting with licensed bookmakers.

PENSION AND SUPERANNUATION SCHEMES

Government, local government and semi-governmental pension and superannuation schemes

The Commonwealth and all State Governments have established pension and superannuation schemes for their employees. These schemes are operated through funds to which both the Governments and their employees make contributions. Employees of local government and semi-governmental authorities are covered either by the Commonwealth and State Government schemes or by a separate scheme of the authority which is operated either through a separately constituted fund or through a life insurance office.

Schemes operated through separately constituted funds

GOVERNMENT, LOCAL GOVERNMENT AND SEMI-GOVERNMENTAL PENSION AND SUPERANNUATION SCHEMES OPERATED THROUGH SEPARATELY CONSTITUTED FUNDS, 1966-67

	Cwlth	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
Income—	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000
Contributions—								
Employees	39,693	20,940	19,039	3,939	3,583	2,887	1,575	91,656
Employing authorities	31,600	38,040	19,695	5,580	3,865	3,277	1,686	103,743
Interest, dividends and rent	19,811	21,679	13,452	2,841	2,814	1,494	1,173	63,262
Other income	70	746	2,835	16	220	175	360	4,421
Total income	*91,173*	*81,404*	*55,020*	*12,376*	*10,482*	*7,833*	*4,794*	*263,082*
Expenditure—								
Pensions	36,031	33,830	20,299	2,773	5,188	3,573	2,007	103,701
Lump sum payments—								
On retirement	2,959	2,663	5,584	197	313	439	118	12,273
On resignation(*a*)	(*b*)31,080	6,223	2,489	625	404	298	346	41,465
Gratuities	1,636	779	45	..	..	4	38	2,503
Other expenditure	10	1,642	2,721	34	315	46	14	4,782
Total expenditure	*71,716*	*45,138*	*31,138*	*3,629*	*6,220*	*4,360*	*2,524*	*164,725*
Assets at end of year—								
Cash—								
Deposits with Treasury	938	166	130	34,905	874	..	..	37,014
Other deposits and cash	7,923	2,879	1,768	483	962	418	451	14,883
Commonwealth Government securities	85,424	3,323	14,685	..	11,697	101	5,261	120,491
Local and semi-governmental securities	222,093	271,434	180,846	27,757	18,767	28,719	11,251	760,868
Mortgages—								
Housing	..	..	480	..	24,143	137	5,211	29,972
Other	55,817	18,533	917	..	..	121	137	75,525
Loans to building societies	231	26,659	1,323	875	..	234	..	29,323
Company shares, debentures and notes	480	78,978	7,243	..	..	657	35	87,393
Other assets	5,875	7,761	(*c*)58,421	29	530	3,671	284	76,571
Total assets	378,780	409,732	265,814	64,050	(*d*)56,974	34,059	22,630	1,232,038
Less Sundry creditors, etc.	464	15,547	1,030	61	16	399	187	17,703
Accumulated funds	*378,316*	*394,185*	*264,785*	*63,989*	*56,957*	*33,660*	*22,443*	*1,214,335*
Contributors at end of year—	No.	No.	No.	No.	No.	No.	No.	No.
Males	202,841	141,102	91,257	20,030	21,928	17,835	9,037	516,537
Females				6,860	2,863		2,784	
Pensioners at end of year—								
Ex-employees—								
Males	16,524	24,090	11,009	1,704	3,207	2,952	1,068	65,709
Females	1,386		1,765	545	682	405	372	
Widows	9,743	4,016	8,659	607	2,758	2,184	918	28,885
Children	3,099	556	1,184	189	270	208	155	5,661

(*a*) Includes refunds of contributions to continuing members. (*b*) Includes refunds to continuing members of excess contributions arising from the Eighth Quinquennial Review of the Commonwealth Superannuation Fund. (*c*) Includes loans to employing authorities. (*d*) Includes assets of the Voluntary Savings Scheme of the State Superannuation Fund valued at $5,353,072 on 30 June 1967.

Schemes operated through life insurance offices

LOCAL GOVERNMENT AND SEMI-GOVERNMENTAL PENSION AND SUPERANNUATION SCHEMES OPERATED THROUGH LIFE INSURANCE OFFICES 1962-63 TO 1966-67

		1962–63	*1963–64*	*1964–65*	*1965-66*	*1966–67*
Income—						
Contributions—						
Employees	$'000	4,164	4,892	5,275	6,046	6,993
Employing authorities	$'000	4,952	5,856	6,462	7,477	8,525
Contributors at end of year	No.	51,119	56,619	58,708	61,354	69,356

Parliamentary pension and superannuation schemes

Pension and superannuation schemes have been established for members of the Commonwealth and State Parliaments. All the schemes are operated through funds to which the members of Parliament and the Commonwealth or State Governments contribute.

PARLIAMENTARY PENSION AND SUPERANNUATION SCHEMES, 1966–67

	Cwlth(a)	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000
Income—								
Contributions—								
Members	159	90	63	40	26	50	37	466
Government	212	68	105	40	56	50	(*b*)3	535
Interest	96	31	19	63	27	31	3	271
Total income	*468*	*190*	*186*	*143*	*110*	*131*	*43*	*1,272*
Expenditure—								
Pension payments	295	108	150	53	51	55	48	760
Other	37	..	3	..	..	..	4	45
Total expenditure	*332*	*108*	*153*	*53*	*51*	*55*	*52*	*805*
Assets at end of year—								
Cash—								
Deposits with Treasury	32	40	21	59	15	3	..	170
Other deposits and cash	..	..	36	..	..	..	4	40
Commonwealth Government securities	491	92	70	..	223	45	45	967
Local government and semi-governmental securities	1,000	510	292	857	299	451	4	3,414
Other assets	..	82	..	258	7	12	1	360
Total assets	1,523	725	419	1,174	545	512	54	4,952
Less Sundry creditors, etc.	..	20	..	1	..	..	1	22
Accumulated funds	*1,523*	*705*	*419*	*1,173*	*545*	*512*	*53*	*4,930*
	No.	No.	No.	No.	No.	No.	No.	No.
Contributors at end of year—								
Males	178	96	106	76	56	78	53	643
Females	5	..	1	1	3	1	1	12
Pensioners at end of year—								
Ex-members	86	37	39	23	13	17	13	228
Widows	(*c*)45	30	39	18	17	26	8	(*c*)183

(*a*) Includes the Ministerial Retiring Allowances Fund. (*b*) State Government proportion of current pensions payable. (*c*) Includes both widows and children in receipt of pensions.

Coal and oil-shale mine workers' superannuation schemes

In all States except South Australia superannuation schemes have been established for coal and oil-shale mine workers. These schemes are operated through funds to which mine workers, mine owners and the State Governments contribute.

COAL AND OIL-SHALE MINE WORKERS' SUPERANNUATION SCHEMES(*a*)
1962-63 TO 1966-67

	1962–63	*1963–64*	*1964–65*	*1965–66*	*1966–67*
	$'000	$'000	$'000	$'000	$'000
Income—					
Contributions—					
Mine workers	766	777	864	918	935
Mine owners	3,364	3,412	3,780	4,024	4,120
State Governments	356	344	330	506	467
Interest, dividends, rent	874	920	976	1,011	1,091
Total income	*5,360*	*5,453*	*5,950*	*6,458*	*6,613*
Expenditure—					
Pension payments	4,432	4,633	5,213	5,248	5,327
Lump sum payments	6	23	8	9	21
Refunds of contributions	6	. .	9	3	1
Administration	114	118	122	123	140
Total expenditure	*4,558*	*4,773*	*5,352*	*5,383*	*5,489*
Assets at end of year—					
Deposits with Treasury	208	272	357	397	398
Other deposits and cash	108	37	14	81	172
Commonwealth Government securities	118	118	118	118	118
Local government and semi-governmental securities	16,890	17,602	18,146	19,064	20,051
Other assets	380	485	499	534	594
Total assets	17,704	18,514	19,133	20,195	21,333
Less Sundry creditors, statutory reserve funds, etc.	n.a.	6,850	164	152	166
Accumulated funds	n.a.	*11,664*	*18,969*	*20,043*	*21,167*
	No.	No.	No.	No.	No.
Contributors at end of year—					
Males	15,700	15,325	15,329	15,756	15,769
Females	15	19	15	15	25
Pensioners at end of year—					
Ex-employees—					
Males	6,693	6,643	6,677	7,334	7,270
Females	2	2	2	2	2
Widows	4,216	4,375	4,424	4,435	4,483
Children	34	56	53	108	97

(*a*) Operating in all States except South Australia.

Private superannuation, pension and retiring allowance schemes

Details of the results of a survey of private superannuation, pension and retiring allowance schemes conducted by private businesses for the benefit of their employees during the year ended June 1963 or the accounting period nearest that year and of similar surveys conducted in 1960–61 and 1961–62 are published in Year Book No. 51 (pages 898–900).

In 1955–56, 1960–61, 1961–62, and 1962–63 sample surveys were conducted of pension and retiring allowance schemes in private businesses subject to pay-roll tax, other than in rural industries, private domestic service, and certain businesses such as accountants, trade associations, consultant engineers, etc. Commonwealth Government airlines and banks were included where they had established their own funds separately from the Commonwealth superannuation funds, but statutory coal miners' pension funds were excluded. Details were asked for three types of pension and retiring allowance schemes. They were (*a*) schemes operated through life insurance offices, (*b*) schemes operated through separately constituted funds, and (*c*) direct payments of pensions and retiring allowances.

The results of the 1955–56 survey are available in *Finance* Bulletin No. 47, Part I—*Public and Private Finance*, and the 1960–61, 1961–62 and 1962–63 survey results were published in *Insurance and Other Private Finance*, Bulletin No. 2 and Year Book No. 51 (pages 898–900). Details of the operations of government and semi-governmental superannuation schemes were published in *Insurance and Other Private Finance*, Bulletins No. 1 and No. 2 for 1961–62 and 1962–63 respectively, and in Parts I of the *Finance Bulletin* for years prior to 1961–62. The results of the 1965–66 survey of government and semi-governmental superannuation schemes were published in November 1967 in a mimeographed bulletin. The monthly bulletin *Life Insurance Statistics* contains some information on the superannuation business of life insurance offices.

In the years 1956–57 to 1958–59, 1963–64 and 1964–65 information was collected from a small number of selected larger funds, and for the years 1955–56 and 1960–61 to 1962–63 the returns for the selected pension schemes were extracted from the sample surveys and tabulated in respect only of the business of their separately constituted funds. In order to improve the coverage of the surveys of selected pension funds, a larger number of funds were surveyed in 1964–65 than in previous surveys of selected funds. The results of the 1964–65 survey were published in September 1966 in a mimeographed bulletin.

Further surveys, relating to the same funds that were included in the 1964–65 survey of selected private pension funds, were made in respect of 1965–66, 1966–67, and 1967–68. The results of the 1967–68 survey are shown below, together with details of the 1964–65, 1965–66 and 1967–68 surveys for comparison. The separately constituted private pension funds included in these surveys accounted for about 72 per cent of the total contributions, 71 per cent of the income, 68 per cent of the expenditure, and 77 per cent of the assets of the funds covered by the 1962–63 sample survey.

Since the *Survey of Selected Private Pension Funds* for 1967–68 was not a representative sample, it is not known to what extent their share of the whole field has changed since the 1962–63 survey; nor is the pattern of income, expenditure and asset distribution of the large funds included in this survey necessarily representative of the whole field.

SELECTED SEPARATELY CONSTITUTED PRIVATE PENSION FUNDS: INCOME AND EXPENDITURE, 1964-65 TO 1967-68(*a*)

($ million)

INCOME

Year	*Employees' contributions*	*Employers' contributions*	*Interest on Cwlth local and semi-governmental securities*	*Other interest, dividends and rent*	*Profit from sale or revaluation of assets*	*Other income (b)*	*Total income*
1964–65	21.8	40.7	15.1	21.6	2.8	2.4	104.4
1965–66	23.3	42.6	15.8	25.2	1.4	4.1	112.4
1966–67	26.6	47.7	19.0	27.0	7.6	5.1	133.0
1967–68	29.4	52.7	20.3	30.8	16.1	6.2	155.6

EXPENDITURE

Year	*Pensions paid*			*Lump sum payments*				*Loss on sale or revaluation of assets*	*Other expenditure (c)*	*Total expenditure*
				To former employees						
	Ex-employees	*Widows or children*	*Total*	*On retirement*	*On resignation or dismissal*	*To widows or children*	*Total*			
1964–65	10.6	2.0	12.6	7.6	8.4	2.3	18.3	4.2	2.3	37.5
1965–66	12.0	2.1	14.1	8.4	9.4	2.3	20.1	2.2	4.1	40.5
1966–67	13.6	2.2	15.8	10.3	9.7	2.6	22.6	0.9	7.6	46.9
1967–68	15.4	2.6	18.0	13.0	10.7	2.9	26.6	1.1	3.4	49.0

(*a*) Years ended 30 June or substituted accounting period. (*b*) Includes receipts from life insurance offices, sub-underwriting commissions, etc. (*c*) Includes administrative expenses payable from funds, payments to life insurance offices, etc.

SELECTED SEPARATELY CONSTITUTED PRIVATE PENSION FUNDS: ASSETS 1964-65 TO 1967-68(*a*)

($ million)

Year	Cash in hand or in bank	Cwlth Govt securities	Local and semi-governmental securities	Loans on mortgage		Company debentures, notes, and other loans to companies	Shares in companies	Land and buildings	All other assets (*b*)	Total assets	Less sundry creditors, etc.	Amount of funds in Australia
				To companies	Other							
					AMOUNT							
1964–65 .	16.7	116.2	176.5	24.3	19.5	167.4	177.5	4.4	9.3	711.8	4.3	707.5
1965–66 .	17.5	126.0	185.3	30.3	20.8	188.6	198.1	5.0	11.9	783.4	4.1	779.4
1966–67 .	19.4	137.3	188.9	42.1	22.0	209.4	228.7	6.8	14.9	869.5	4.3	865.1
1967–68 .	22.2	155.2	195.0	56.2	26.5	230.0	258.0	8.2	21.6	972.9	4.7	968.2
					PERCENTAGE DISTRIBUTION							
1964–65 .	2.3	16.3	24.8	3.4	2.7	23.5	24.9	0.6	1.3	100.0	0.6	99.4
1965–66 .	2.2	16.1	23.7	3.9	2.7	24.1	25.3	0.6	1.5	100.0	0.5	99.5
1966–67 .	2.2	15.8	21.7	4.8	2.5	24.1	26.3	0.8	1.7	100.0	0.5	99.5
1967–68 .	2.3	15.9	20.0	5.8	2.7	23.6	26.5	1.0	2.2	100.0	0.5	99.5

(*a*) Book values at balance dates. (*b*) Includes loans to authorised dealers in the short-term money market and loans to building societies.

PROBATES AND LETTERS OF ADMINISTRATION

The following table gives some particulars of the number and value of estates of deceased persons in each State for the latest year for which information is available. Owing to differences in legislation in the various States the figures are not entirely comparable.

PROBATES AND LETTERS OF ADMINISTRATION: STATES

		N.S.W. 1967–68 (*a*)	*Vic.* 1967	*Qld* 1967–68	*S.A.* 1967	*W.A.* 1966–67 (*b*)(*c*)	*Tas.* 1967 (*d*)
Estates . . .	No.	28,621	19,768	10,615	4,887	4,698	2,053
Gross value . .	$'000	n.a.	326,664	190,298	77,365	n.a.	30,816
Net value . . .	$'000	461,766	294,213	176,886	71,542	51,352	27,610

(*a*) Total estates of deceased persons assessed for death duty. (*b*) Net value includes duty-free bequests of $613,000. (*c*) Figures not comparable with those for earlier periods. (*d*) Estates dealt with by the Taxation Department.

CHAPTER 19

PUBLIC FINANCE

The subject of public finance is dealt with in this chapter under the two major divisions of Commonwealth Finance and State Finance. The close financial relations between the Commonwealth and States, however, particularly since the Financial Agreement has been in operation, demand also a combination of these two divisions under the heading of Commonwealth and State Finance. Under the Financial Agreement the Commonwealth assumed the liability to bondholders for the States' securities existing at the date of the Agreement and now arranges for all borrowings for and on behalf of the Commonwealth or any State and for all conversions, renewals, redemptions and consolidations of such securities. In view of this it is convenient to deal with the Commonwealth and State Government securities on issue in a separate division of this chapter (page 752). The subject of income taxes is also dealt with in a separate division at the end of this chapter (page 768).

For further detailed information on the subjects covered by this chapter *see* the annual bulletins published by this Bureau: *Australian National Accounts; National Income and Expenditure; Commonwealth Finance; State, Territory and Local Government Authorities' Finance and Government Securities;* and *Commonwealth Taxation Assessments*. Current information in summarised form is contained in the *Quarterly Summary of Australian Statistics*, the *Monthly Review of Business Statistics*, and the *Digest of Current Economic Statistics*. A mimeographed statement *Commonwealth, State and Territory Taxation Collections* is issued annually as soon as possible after the relevant information has been assembled.

COMMONWEALTH FINANCE

Financial provisions of the Constitution

The main provisions of the Constitution relating to the initiation and development of the financial system of the Commonwealth are contained in Sections 81 to 105A of the Commonwealth Constitution (*see* pages 16–19 of this Year Book). Two other sections which have a most important bearing on questions of Commonwealth finance are Sections 69 and 51.

Section 69 provides for the transfer from the States to the Commonwealth of certain specified departments, and Section 51, in outlining the powers of the Commonwealth Parliament, implies the transfer or creation of other departments. Sections 87 and 96 deal with the financial relations between the Commonwealth and the States. These matters have been treated in previous issues of the Year Book, and on pages 707–16 of this issue a summary is given of the present provisions for Commonwealth financial assistance to the States.

The *Audit Act* 1901–1966 lays down the procedure which must be followed in accounting for the receipt and disbursement of public funds. The general administration of Commonwealth finances is the responsibility of the Treasurer of the Commonwealth.

Commonwealth Public Account

Nature of account

The Commonwealth Public Account includes the Consolidated Revenue Fund, the Trust Fund and the Loan Fund. Ordinary revenues from taxation and other sources are paid into the Consolidated Revenue Fund, from which the main expenditures are for defence, war and repatriation services, social services, payments to the States, Commonwealth business undertakings (mostly postal, telephone and telegraph), and administration. The Trust Fund covers special transactions outside the ordinary operations of departmental expenditures, such as pension funds and moneys held for expenditure by the Commonwealth at some future time. The Loan Fund receives its funds from the sale of Commonwealth securities, and expenditures from the Fund are made in accordance with the purpose of issue of each loan. The main disbursements from the Loan Fund are to the States, either by way of distribution of the proceeds of loans raised by the Commonwealth on their behalf or in accordance with the provisions of the Commonwealth and State Housing Agreements, and the remaining disbursements are for Commonwealth purposes such as defence or war service land settlement.

Summary of receipts and expenditure

A summary of transactions on the Commonwealth Public Account for 1967–68 and the four preceding years is given in the table which follows. The transactions are recorded on a cash basis.

COMMONWEALTH PUBLIC ACCOUNT: SUMMARY OF TRANSACTIONS 1963-64 TO 1967-68

($ million)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Expenditure(*a*)(*b*)	4,389.1	4,784.6	5,379.7	5,922.5	6,557.7
Receipts(*b*)	3,993.3	4,627.9	5,128.6	5,387.8	5,962.4
Excess of expenditure over receipts—borrowing requirement	*395.8*	*156.8*	*251.1*	*534.6*	*595.3*
Borrowings—					
Overseas loan proceeds(*c*)	73.3	43.1	37.6	52.8	75.3
Less redemptions, etc.	47.3	80.1	77.4	134.7	111.6
Net proceeds	26.0	−37.0	−39.8	−81.9	−36.3
Australian loan proceeds(*d*)	578.4	501.7	546.2	646.3	571.5
Less redemptions, etc.	153.4	270.2	254.5	258.5	292.6
Net proceeds	425.1	231.5	291.6	387.8	278.9
Total net loan proceeds	451.1	194.5	251.8	305.9	242.5
Credit arrangements for defence purchases in the United States of America	..	..	..	90.6	132.1
Less repayments	..	..	..	..	14.1
Net credit arrangements, etc.; U.S.A.	..	..	..	90.6	118.0
Residual financing—					
Borrowings from Reserve Bank	−68.0	+38.0	−36.0	+165.0	+51.0
Treasury Notes (Issue +, Redemption −)	+13.6	−72.1	+35.7	−25.9	+183.6
Cash balances (Increase −, Decrease +)	−0.9	−3.6	−0.4	−0.9	+0.2
Total residual financing	−55.3	−37.7	−0.7	+138.2	+234.7
Total borrowings	*395.8*	*156.8*	*251.1*	*534.6*	*595.3*

(*a*) Excludes payments to Loan Consolidation and Investment Reserve: 1963–64, $29.8 million; 1964–65, $222.7 million; 1965–66, $210.5 million; 1966–67, $227.7 million; and 1967–68, $312.8 million. (*b*) Comparisons between these figures are affected by accounting changes. (*c*) Overseas refinancing operations are treated as adding to both loan proceeds and redemptions where they involve receipts into and expenditures from Loan Fund. (*d*) Excludes State domestic raisings and loans raised on behalf of Qantas Airways and Australian National Airlines Commission.

Minus sign (−) denotes decrease.

All Commonwealth funds: summary of receipts and expenditure

The following table represents a reclassification of Commonwealth Government receipts and expenditure in a national accounts form. It includes the Commonwealth Government components (with slight re-arrangement) of Tables 57 and 60 in *Australian National Accounts, National Income and Expenditure* 1967–68. Advances to semi-governmental business undertakings are included in 'Other advances', but grants to other semi-governmental bodies (National Capital Development Commission, Australian National University, Stevedoring Industry Authority, etc.) are classified according to the final expenditure of the authority concerned.

ALL COMMONWEALTH FUNDS: RECEIPTS AND EXPENDITURE, 1963-64 TO 1967-68
($ million)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
EXPENDITURE					
Current expenditure on goods and services	879	1,019	1,195	1,451	1,677
Capital expenditure on new assets and stocks	224	280	312	354	409
Purchases of existing assets	4	4	5	5	9
Subsidies	101	86	127	146	153
Interest	76	82	75	74	89
Cash benefits to persons	1,029	1,080	1,156	1,246	1,294
Grants for private capital purposes	9	26	47	45	(*b*) 57
Overseas grants and contributions	86	106	128	152	159
Grants to States	895	958	1,076	1,183	1,312
Advances to States	136	142	173	167	176
Other advances	154	193	200	182	251
Total expenditure	**3,593**	**3,975**	**4,493**	**5,004**	**5,585**
RECEIPTS					
Taxation	3,220	3,788	4,188	4,456	4,917
Interest, rent and dividends	93	104	117	127	112
Net revenue of business undertakings	123	147	153	149	170
Fees and charges for goods and services	52	55	63	63	66
Sales of existing assets	12	17	13	8	9
Repayments of advances to States	21	22	28	31	31
Repayments of other advances	34	37	36	40	47
Other net receipts(*a*)	38	−196	−106	130	233
Total receipts	**3,593**	**3,975**	**4,493**	**5,004**	**5,585**

(*a*) Includes borrowing on treasury bills and Commonwealth bonds and net change in cash balances. (*b*) Includes $21,000,000 devaluation compensation paid to marketing authorities.

Minus sign (−) denotes decrease.

All Commonwealth funds: expenditure, economic type and function

In the following two tables particulars of expenditure for 1967–68 shown in the previous table have been reclassified to a 'net' basis by taking account of the relevant items shown as receipts in that table, e.g. fees and charges for goods and services, sales of existing assets, etc., and the resulting totals have been classified by economic type and by function.

ALL COMMONWEALTH FUNDS

1967-68

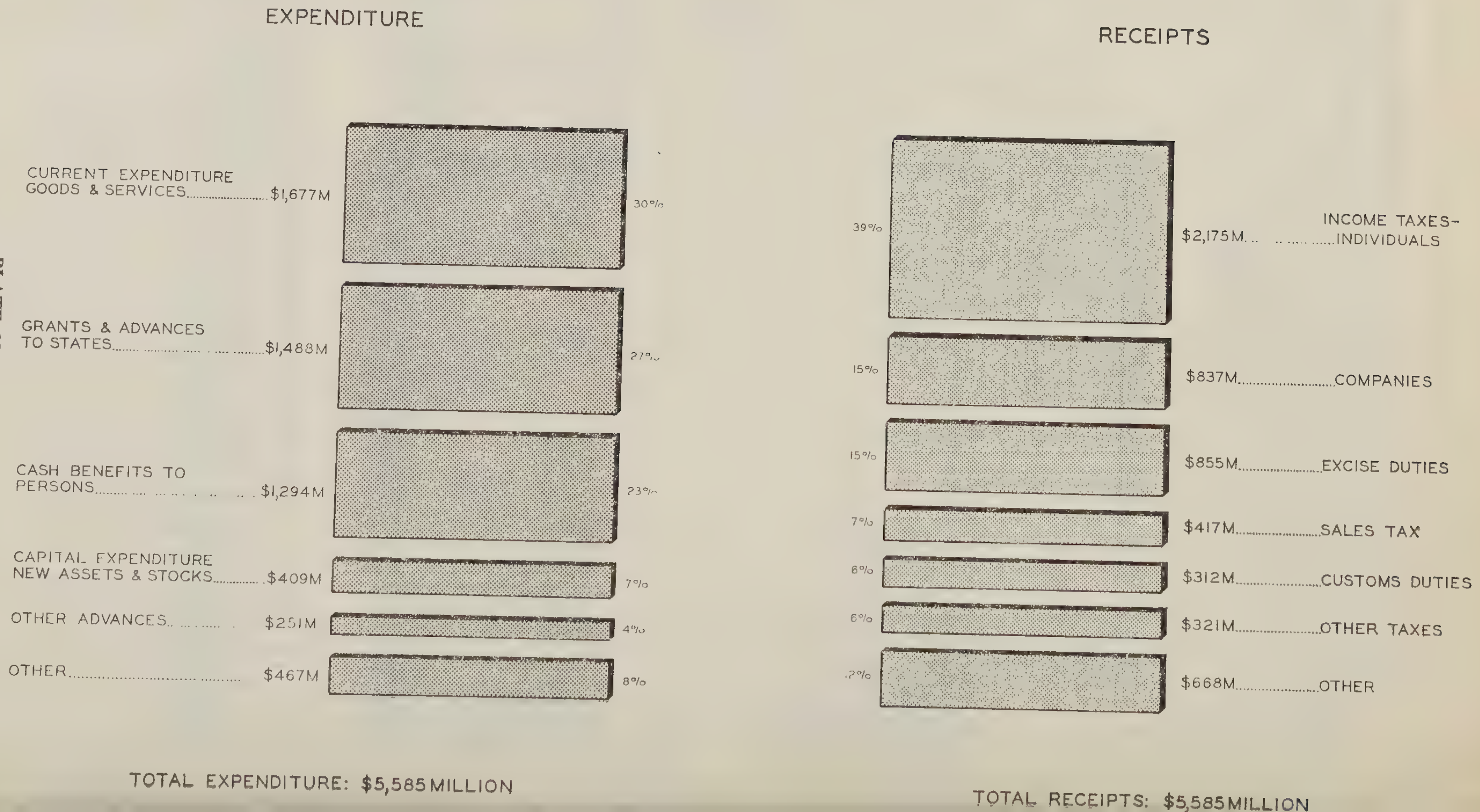


PLATE 38

ALL COMMONWEALTH FUNDS: TOTAL NET EXPENDITURE, BY ECONOMIC TYPE AND FUNCTION, 1967–68

($ million)

NET CURRENT EXPENDITURE

	Expenditure on goods and services	*Cash benefits*	*Subsidies*	*Overseas grants*	*Grants to States*	*Interest*	*Grants for private capital purposes*	*Total*
Law, order and public safety	11	..	..	..	..	..	..	11
Education	29	28	..	1	48	..	1	107
Cultural and recreational facilities	8	..	..	1	..	..	..	9
Public health	27	264	..	1	..	..	..	292
Welfare	21	796	..	..	..	..	9	826
War and defence	1,040	..	..	26	..	..	..	1,065
Repatriation	73	198	..	..	..	..	6	277
Development of resources and assistance to industry	122	..	125	1	30	..	21	299
Transport and communication	32	..	3	8	..	..	..	43
Legislature and general administration	152	..	..	3	..	..	..	155
External affairs	23	..	..	38	..	..	..	62
Immigration	38	5	..	1	..	..	..	44
Regulation of trade and industry	13	3	25	..	..	..	..	41
Housing	5	..	..	..	..	..	13	18
Other	1	..	..	79	..	..	6	87
Not allocated to function	15	..	..	..	979	11	..	1,004
Total net current expenditure	**1,611**	**1,294**	**153**	**159**	**1,057**	**11**	**57**	**4,340**

NET CAPITAL EXPENDITURE

	Expenditure on new assets and stocks	*Net purchases of existing assets*	*Grants to States*	*Net advances to States*	*Other net advances*	*Total*
Education	12	..	54	..	..	66
Cultural and recreational facilities	12	..	..	..	1	12
Public health	1	..	5	..	..	7
War and defence	..	2	..	..	..	2
Development of resources and assistance to industry	21	..	8	11	23	64
Transport and communication—						
Post office	240	3	..	..	..	242
Civil aviation	29	2	..	..	50	81
Roads	21	..	166	−1	..	186
Other	16	..	21	12	..	48
Power, fuel and light	..	..	..	5	40	46
Housing	19	−9	..	118	22	149
Other	35	2	..	..	2	40
Not allocated to function	3	..	..	1	66	70
Total net capital outlay	**409**	..	**255**	**146**	**204**	**1,012**

The following table shows net expenditure from all Commonwealth funds for the years 1963–64 to 1967–68, classified according to function.

ALL COMMONWEALTH FUNDS: TOTAL NET EXPENDITURE, BY FUNCTION 1963-64 TO 1967-68

($ million)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
NET CURRENT EXPENDITURE					
Law, order and public safety	5	6	7	9	11
Education	46	64	75	91	107
Cultural and recreational facilities	4	5	5	7	9
Public health	202	220	250	271	292
Welfare	665	696	721	797	826
War and defence	489	567	707	911	1,065
Repatriation	235	240	268	267	277
Development of resources and assistance to industry	162	166	217	264	299
Transport and communication	33	37	40	38	43
Legislature and general administration	88	102	116	144	155
External affairs	31	41	46	51	62
Immigration	29	36	38	41	44
Regulation of trade and industry	16	18	28	34	41
Housing	3	15	18	17	18
Other	60	69	89	87	87
Not allocated to function	760	781	855	912	1,004
Total net current expenditure	**2,828**	**3,063**	**3,480**	**3,941**	**4,340**
NET CAPITAL EXPENDITURE					
Education	21	42	43	51	66
Cultural and recreational facilities	9	12	11	11	12
Public health	5	7	9	8	7
War and defence	7	1	3	1	2
Development of resources and assistance to industry	12	18	28	32	64
Transport and communication—					
Post office	128	165	185	206	242
Civil aviation	3	42	42	47	81
Roads	131	147	162	171	186
Other	35	31	43	39	48
Power, fuel and light	48	45	42	47	46
Housing	146	154	165	157	149
Other	28	19	27	41	40
Not allocated to function	19	39	52	36	70
Total net capital expenditure	**593**	**722**	**812**	**847**	**1,012**

This table classifies by function the expenditure on goods and services (reclassified to a net basis) shown in the table on page 701.

ALL COMMONWEALTH FUNDS: NET EXPENDITURE ON GOODS AND SERVICES BY FUNCTION(*a*), 1963-64 TO 1967-68

($ million)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
NET CURRENT EXPENDITURE					
Law, order and public safety	5	6	7	9	11
Education	15	19	21	24	29
Cultural and recreational facilities	4	5	5	7	8
Public health	14	16	20	24	27
Welfare	14	15	14	17	21
War and defence	485	558	684	876	1,040
Repatriation	53	56	62	68	73
Development of resources and assistance to industry	74	95	106	115	122
Transport and communication	24	27	25	30	32
Legislature and general administration	83	98	111	139	152
External affairs	14	15	17	18	23
Immigration	26	33	33	35	38
Regulation of trade and industry	8	9	9	9	13
Housing	3	4	4	5	5
Other	1	4	3	..	1
Not allocated to function	2	5	10	11	15
Total net current expenditure	**827**	**964**	**1,132**	**1,388**	**1,611**
NET CAPITAL EXPENDITURE—NEW ASSETS AND STOCKS					
Education	8	9	9	11	12
Cultural and recreational facilities	9	12	10	9	12
Public health	3	3	3	2	1
Development of resources and assistance to industry	8	13	12	22	21
Transport and communication—					
Post office	128	164	184	205	240
Civil aviation	11	16	22	28	29
Roads	9	9	14	13	21
Other	9	8	12	13	16
Housing	9	11	15	14	19
Other	20	21	22	33	35
Not allocated to function	9	14	10	5	3
Total net capital expenditure	**224**	**280**	**312**	**354**	**409**

(*a*) This table includes the Commonwealth Government component of Tables 66 and 75 in *Australian National Accounts, National Income and Expenditure* 1958–59 to 1967–68 together with net expenditure on stocks.

Main components of Commonwealth expenditure

The tables on pages 704–14 supply details of some of the main components of total expenditure of the Commonwealth Government.

Subsidies

The following table shows details of Commonwealth expenditure from all funds on assistance to primary producers, subsidies and bounties for the years 1963–64 to 1967–68. Expenditure on special relief such as drought, frost, flood, and bush fire, etc., is not included here (included as cash benefits to persons in tables, pages 705–6) nor is expenditure from the proceeds of certain taxes on primary products and profits from marketing schemes, which have been paid to trust funds for the purpose of price or other stabilisation schemes or for distribution to producers (*see* pages 729–30). Payments to the States for cattle tick control, dairy industry extension and agricultural advisory services are not included under this heading, but included under the heading Grants to the States (*see* pages 707–11). Further information relating to assistance to primary producers is given in the chapter Rural Industry. Details of price stabilisation subsidies and of various forms of assistance to primary producers for earlier years are given on pages 414 and 1014–15, respectively, of Year Book No. 38.

ALL COMMONWEALTH FUNDS: EXPENDITURE ON SUBSIDIES, 1963-64 TO 1967-68
($'000)

Type of subsidy	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Development of resources and assistance to industry—					
Dairy industry	27,000	27,000	27,000	27,000	27,000
Wheat prices stabilisation	22,634	1,892	18,069	16,154	15,508
Phosphate fertilisers	18,806	22,880	24,983	26,319	23,564
Oil search	9,434	8,838	11,382	9,931	11,711
Nitrogenous fertilisers	..	..	..	6,665	10,308
Copper	1,390	300	1	..	..
Gold mining industry	1,496	1,860	2,462	3,848	4,362
Pyrites	1,228	924	854	103	..
Cotton	946	1,916	3,686	2,813	4,027
Processed milk products	800	864	614	899	743
Sulphate of ammonia	318	526	427	830	565
Vinyl resin	228	364	1,938	1,592	12
Copper and brass strip	124	154	43	..	..
Northern Territory—					
Railway freight	92	90	140	110	100
Transport of stud stock	48	40	59	83	80
Superphosphate sea subsidy	..	..	..	5	43
Ship construction	4,436	5,538	7,465	11,264	11,205
Sulphuric acid	2,316	1,822	1,906	1,556	1,286
Tractor	2,014	2,754	1,902	2,221	2,480
Cellulose acetate flake	218	134	228	218	220
Flax fibre	4	..	..	..	..
Poultry industry assistance	..	..	5,536	9,213	10,418
Urea	..	..	..	9	163
Transport and communication—					
Air services	1,000	1,000	1,200	1,306	1,901
Coastal shipping service—					
King Island and Bass Strait Islands	24	66	161	160	150
Northern Territory	8	14	43	44	39
Northern Territory air mail service	116	118	118	..	..
South American shipping service	304	278	335	351	300
Regulation of trade and industry—					
Stevedoring industry	5,742	6,094	6,149	6,525	8,553
Petrol prices stabilisation	..	..	9,920	15,218	16,578
Northern Territory petrol prices	..	..	345	750	991
Other	300	326	400	399	433
Total	**101,026**	**85,792**	**127,366**	**145,586**	**152,740**

Cash benefits to persons

Particulars of cash benefits paid to persons in each State and Territory during 1967–68 are shown in the next table and the total payments during the years 1963–64 to 1967–68 are shown in the table following.

ALL COMMONWEALTH FUNDS: CASH BENEFITS TO PERSONS STATES AND TERRITORIES, 1967-68

($'000)

e of benefit	*N.S.W.(a)*	*Vic.*	*Qld*	*S.A.(a)*	*W.A.*	*Tas.*	*N.T.(a)*	*A.C.T.(a)*	*Abroad*	*Total*
cation—										
ommonwealth scholarship scheme—										
Post-graduate	1,344	668	336	359	129	63	(*b*)	(*b*)	. .	2,899
University	3,559	4,577	2,677	1,302	919	349	(*b*)	(*b*)	. .	13,383
Advanced education	182	323	106	53	71	19	(*b*)	(*b*)	. .	754
Secondary	2,518	1,809	942	567	459	178	(*b*)	(*b*)	1	6,474
Technical	354	345	150	81	76	25	(*b*)	(*b*)	. .	1.031
oldiers' children education scheme	938	748	489	252	172	104	(*b*)	(*b*)	18	2,720
ther	(*b*)	(*b*)	(*b*)	(*b*)	(*b*)	(*b*)	(*b*)	(*b*)	(*b*)	852
Total, education	*8,895*	*8,470*	*4,700*	*2,614*	*1,826*	*738*	(*b*)	(*b*)	*19*	(*c*)*28,113*
lth—										
ospital benefits	11,697	6,279	3,268	2,467	2,060	735	80	12	. .	26,598
ospital benefits for pensioners	8,871	5,272	4,259	1,969	2,316	783	40	156	. .	23,665
ursing home benefits	10,386	5,121	3,752	2,202	2,222	800	. .	3	. .	24,486
ledical benefits	18,314	12,301	4,499	5,774	4,093	1,450	. .	. .	. .	46,431
ledical benefits for pensioners	6,217	4,242	2,364	1,607	1,172	460	5	49	. .	16,116
lilk for school children	3,350	2,623	1,372	952	850	503	75	106	. .	9,831
harmaceutical benefits	28,989	20,031	10,036	6,685	4,974	2,049	(*b*)	255	. .	73,019
harmaceutical benefits for pensioners	13,563	7,505	5,016	3,038	2,143	850	. .	. .	. .	32,115
uberculosis campaign	3,813	3,306	2,415	620	807	304	. .	. .	. .	11,266
Total, health	*105,200*	*66,680*	*36,981*	*25,314*	*20,637*	*7,934*	*200*	*581*	. .	*263,529*
lfare—										
ge and invalid pensions	200,962	129,334	82,210	46,711	36,418	15,414	1,336	1,111	488	513,984
hild endowment	64,684	52,675	28,177	17,835	14,845	6,612	1,209	1,810	74	187,920
ommonwealth rehabilitation service	645	493	284	267	193	58	. .	. .	2	1,944
uneral benefits	500	362	210	134	90	39	. .	3	. .	1,338
laternity allowances	2,462	2,102	1,103	670	605	254	64	87	3	7,349
uberculosis campaign—allowances	363	251	285	80	55	38	17	2	. .	1,091
nemployment benefits	3,665	2,425	2,913	1,637	304	264	19	15	. .	11,242
ickness benefits	2,502	1,646	941	563	420	165	22	30	. .	6,290
pecial benefits	351	664	149	58	33	42	1	2	. .	1,300
idows' pensions	22,745	15,807	9,564	5,937	4,346	2,125	217	249	71	61,061
heltered employment allowances	11	. .	. .	88	5	. .	. .	. .	. .	104
eserted wives benefits	140	. .	. .	25	35	. .	. .	. .	. .	201
ther	(*b*)	(*b*)	(*b*)	(*b*)	(*b*)	(*b*)	(*b*)	(*b*)	(*b*)	2,220
Total, welfare	*299,030*	*205,759*	*125,836*	*74,005*	*57,349*	*25,011*	*2,885*	*3,309*	*638*	(*c*)*796,044*
elopment of resources and ssistance to industry—										
Wool research studentships and fellowships	(*b*)	(*b*)	(*b*)	(*b*)	(*b*)	(*b*)	(*b*)	(*b*)	(*b*)	270
atriation—										
ar and service pensions and allowances	68,427	54,637	30,861	17,252	15,711	7,804	(*b*)	(*b*)	1,528	196,219
ther	(*b*)	(*b*)	(*b*)	(*b*)	(*b*)	(*b*)	(*b*)	(*b*)	(*b*)	1,952
Total, repatriation	*68,427*	*54,637*	*30,861*	*17,252*	*15,711*	*7,804*	(*b*)	(*b*)	*1,528*	(*c*)*198,171*
nigration—										
laintenance of migrant families	(*b*)	(*b*)	(*b*)	(*b*)	(*b*)	(*b*)	(*b*)	(*b*)	. .	4,803
ulation of Trade and ndustry—										
Coal mining industry—long service leave	600	. .	278	. .	33	7	. .	. .	. .	918
tevedoring industry	(*b*)	(*b*)	(*b*)	(*b*)	(*b*)	(*b*)	(*b*)	. .	. .	2,194
Total, regulation of trade and industry	*600*	. .	*278*	. .	*33*	*7*	. .	. .	. .	(*c*)*3,112*
ısing—										
ommonwealth-State Housing Agreement—contribution to rental losses	. .	. .	44	. .	. .	. .	. .	. .	. .	44
Grand total	482,152	335,546	198,700	119,185	95,556	41,494	3,085	3,890	2,185	(*c*)1,294,086

(*a*) State totals for New South Wales and South Australia also include most of the unallocated expenditure on cash benefits to persons
dent in the Australian Capital Territory and the Northern Territory respectively. (*b*) Not allocable. (*c*) Includes items not
cable. *See* footnote (*b*).

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ALL COMMONWEALTH FUNDS: CASH BENEFITS TO PERSONS
1963–64 TO 1967–68

($'000)

Type of benefit	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Education—					
Commonwealth scholarship scheme—					
Post-graduate	834	1,236	1,733	2,432	2,899
University	6,897	7,903	10,064	13,890	13,383
Advanced education	..	..	198	660	754
Secondary	..	3,382	5,197	6,243	6,474
Technical	..	212	600	816	1,031
Soldiers' children education scheme	2,302	2,311	2,534	2,462	2,720
Other	433	573	812	816	852
Total, education	*10,464*	*15,614*	*21,140*	*27,319*	*28,113*
Health—					
Hospital benefits	24,983	25,411	24,860	25,900	26,598
Hospital benefits for pensioners	13,354	13,585	14,659	18,731	23,665
Nursing home benefits	17,880	19,796	21,223	22,767	24,486
Medical benefits	24,848	35,277	41,282	43,841	46,431
Medical benefits for pensioners	9,531	9,320	13,365	14,351	16,116
Milk for school children	7,775	8,059	8,493	9,021	9,831
Pharmaceutical benefits	58,237	60,638	67,713	72,000	73,019
Pharmaceutical benefits for pensioners	20,602	21,564	24,071	29,280	32,115
Tuberculosis campaign	10,444	10,111	13,361	10,974	11,266
Total, health	*187,656*	*203,762*	*229,028*	*246,868*	*263,529*
Welfare—					
Age and invalid pensions	399,880	426,597	442,355	481,840	513,984
Child endowment	168,758	172,830	176,432	199,282	187,920
Commonwealth rehabilitation service	1,489	1,604	1,660	1,844	1,944
Funeral benefits	812	866	1,050	1,334	1,338
Maternity allowances	7,457	7,294	7,159	7,294	7,349
Tuberculosis campaign—allowances	1,593	1,458	1,286	1,193	1,091
Unemployment benefits, sickness and special benefits	21,625	14,540	15,557	19,044	18,832
Widows' pensions	41,569	47,044	50,017	56,438	61,061
Sheltered employment allowances	..	..	..	..	104
Deserted wives benefits	..	..	..	..	201
Other	470	1,025	2,066	1,795	2,220
Total, welfare	*643,654*	*673,258*	*697,580*	*770,064*	*796,044*
Development of resources and assistance to industry—					
Wool research studentships and fellowships	62	58	85	158	270
Repatriation—					
War and service pensions and allowances	179,051	179,313	198,662	190,842	196,219
Other	1,845	1,694	1,849	1,908	1,952
Total, repatriation	*180,896*	*181,007*	*200,511*	*192,750*	*198,171*
Immigration—					
Maintenance of migrant families	3,472	3,752	4,380	5,240	4,803
Regulation of trade and industry—					
Coal mining industry—long service leave	910	1,021	893	919	918
Stevedoring industry	1,674	1,614	1,726	2,824	2,194
Total, regulation of trade and industry	*2,584*	*2,635*	*2,619*	*3,743*	*3,112*
Housing—					
Commonwealth-State Housing Agreement—					
Contribution to rental losses	45	130	213	142	44
Grand total	**1,028,833**	**1,080,216**	**1,155,556**	**1,246,284**	**1,294,086**

Further information concerning items in the two preceding tables is given in the appropriate chapters of this Year Book.

Payments to or for the States

An outline of the provisions of the Constitution providing for the Commonwealth to make payments to the States, and of the systems which followed, is given in earlier issues of the Year Book (*see* No. 37, pages 633 to 638). A distinction is made in this Year Book between (*a*) direct Commonwealth financial assistance to the States in the form of grants to provide revenue for general and specific purposes and (*b*) those forms of assistance for developmental and other specific purposes which include, in part or in total, payments made in the form of repayable advances. Some information about the more important or most recent of these forms of financial assistance is given on pages 713–6, but for greater detail on these and other forms of financial assistance *see* Year Book No. 51, pages 921–4, and earlier issues. Further information is available also in the chapters of this issue dealing with the respective subjects.

Grants. The following three tables show particulars of the amounts paid to the States as grants for the purposes referred to in (*a*) above.

ALL COMMONWEALTH FUNDS: GRANTS TO THE STATES, BY FUNCTION, 1967-68
($'000)

Function	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
CURRENT							
Education—							
Research grants	1,044	770	365	560	257	158	3,154
Universities	15,816	10,991	5,146	4,107	2,652	1,200	39,912
Colleges of advanced education	608	2,788	409	554	776	138	5,273
Total, education	*17,468*	*14,549*	*5,920*	*5,221*	*3,685*	*1,496*	*48,339*
Welfare—							
Housekeeper services	12	8	..	..	2	1	23
Development of resources and assistance to industry—							
Natural disaster payments	9,488	10,128	4,830	2,452	..	200	27,098
Cattle tick control	288	..	..	..	..	..	288
Agricultural extension services	760	667	664	368	294	147	2,900
Total, development, etc.	*10,536*	*10,795*	*5,494*	*2,820*	*294*	*347*	*30,286*
Not allocated to function—							
Financial assistance grants	302,827	228,254	139,601	102,738	96,152	37,968	907,539
Special grants	..	..	..	..	15,518	19,889	35,407
Interest and exchange	5,834	4,254	2,192	1,408	948	534	15,170
Sinking fund and redemption	6,826	4,885	2,619	2,673	1,986	1,398	20,387
Total, not allocated	*315,487*	*237,393*	*144,412*	*106,819*	*114,604*	*59,789*	*978,503*
Total, current	**343,503**	**262,745**	**155,826**	**114,860**	**118,585**	**61,633**	**1,057,152**

ALL COMMONWEALTH FUNDS: GRANTS TO THE STATES, BY FUNCTION

1967–68—*continued*

($'000)

Function	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
CAPITAL							
Education—							
Colleges of advanced education	1,335	2,677	566	713	1,304	52	6,647
Secondary	4,708	3,553	1,821	1,173	912	420	12,587
Technical	3,980	5,091	1,449	1,700	1,323	334	13,877
Universities	5,472	6,173	1,826	1,664	567	627	16,329
Teachers colleges	253	500	1,086	502	1,817	360	4,518
Total, education	*15,748*	*17,994*	*6,748*	*5,752*	*5,923*	*1,793*	*53,958*
Public health—							
Mental institutions	2,095	1,382	196	64	148	358	4,243
Tuberculosis hospitals—capital	591	10	135	31	10	3	780
Disposal of ships' garbage	..	..	..	38	..	1	39
Total, public health	*2,686*	*1,392*	*331*	*133*	*158*	*362*	*5,062*
Development of resources and assistance to industry—							
Natural disaster payments	..	..	555	..	..	3,850	4,405
Flood mitigation	1,309	..	..	..	..	..	1,309
Investigation of water resources	359	131	414	125	260	20	1,309
Ord project	..	..	..	..	100	..	100
Maraboon dam	..	..	700	..	..	..	700
Salinity reduction	..	600	..	..	..	..	600
Total, development, etc.	*1,668*	*731*	*1,669*	*125*	*360*	*3,870*	*8,424*
Transport and communication—							
Roads—							
Commonwealth aid roads	44,467	31,288	29,266	18,384	28,597	8,000	160,000
Cattle roads	..	..	4,000	..	1,400	..	5,400
Gordon River road	..	..	..	..	..	200	200
Other—							
Railway projects	8,250	..	..	4,663	8,012	..	20,925
Total, transport, etc.	*52,717*	*31,288*	*33,266*	*23,047*	*38,009*	*8,200*	*186,525*
Other—							
Exmouth township	..	..	..	..	417	..	417
Migrant centres	67	..	..	2	357	..	426
Total, other	*67*	..	..	*2*	*774*	..	*843*
Total capital	**72,887**	**51,405**	**42,014**	**29,059**	**45,224**	**14,225**	**254,811**
TOTAL GRANTS							
Grand total	**416,389**	**314,150**	**197,840**	**143,919**	**163,809**	**75,858**	**1,311,963**

ALL COMMONWEALTH FUNDS: TOTAL GRANTS TO THE STATES, BY FUNCTION 1963-64 TO 1967-68

($'000)

Function	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
CURRENT					
Education—					
Research grants	..	..	1,378	2,038	3,154
Universities	21,080	28,942	31,551	34,262	39,912
Colleges of advanced education	..	..	..	2,472	5,273
Total, education	*21,080*	*28,942*	*32,929*	*38,772*	*48,339*
Welfare—housekeeper services	28	24	22	23	23
Development of resources and assistance to industry—					
Natural disaster payments	..	..	9,706	22,918	27,098
Cattle tick control	518	414	348	252	288
Agricultural extension services	1,262	1,212	1,202	2,176	2,900
Tobacco industry extension services	48	..	..	..	..
Total, development, etc.	*1,828*	*1,626*	*11,256*	*25,346*	*30,286*
Not allocated to function—					
Financial assistance grants	635,968	681,348	757,351	826,613	907,539
Special grants	22,900	31,720	41,770	40,072	35,407
Interest and exchange	15,170	15,170	15,170	15,170	15,170
Sinking fund and redemption	15,690	16,646	17,761	18,951	20,387
Additional assistance grants	40,000	..	..	..	..
Total, not allocated	*729,728*	*744,882*	*832,052*	*900,806*	*978,503*
Total, current	**752,664**	**775,474**	**876,259**	**964,947**	**1,057,152**

ALL COMMONWEALTH FUNDS: TOTAL GRANTS TO THE STATES, BY FUNCTION
1963–64 TO 1967–68—*continued*

($'000)

Function	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
CAPITAL					
Education—					
Colleges of advanced education	. .	. .	982	3,681	6,647
Secondary	. .	9,906	9,635	10,163	12,587
Technical	. .	10,000	6,230	9,894	13,877
Universities	12,780	12,332	15,227	16,354	16,329
Teachers colleges	. .	. .	. .	. .	4,518
Total, education	*12,780*	*32,238*	*32,074*	*40,091*	*53,958*
Public health—					
Mental institutions	1,594	2,504	4,539	4,973	4,243
Tuberculosis hospitals—capital	598	696	696	499	780
Disposal of ships' garbage	. .	. .	. .	29	39
Total, public health	*2,192*	*3,200*	*5,235*	*5,501*	*5,062*
Development of resources and assistance to industry—					
Western Australia—northern development	1,816	2,018	1,112	. .	. .
Flood mitigation	400	1,300	1,540	970	1,309
Natural disaster payments	. .	. .	. .	1,206	4,405
Encouragement of meat production	. .	. .	. .	8	. .
Investigation of water resources	. .	687	860	971	1,309
Ord project	. .	. .	. .	. .	100
Maraboon dam	. .	. .	. .	. .	700
Salinity reduction	. .	. .	. .	. .	600
Total, development, etc.	*2,216*	*4,007*	*3,512*	*3,155*	*8,424*
Transport and communication—					
Roads—					
Commonwealth aid roads	116,000	130,000	140,000	150,000	160,000
Cattle roads	3,596	3,800	3,500	3,753	5,400
Gordon River road	270	1,094	1,840	1,596	200
Other—					
Railway projects	5,182	7,386	11,849	12,278	20,925
Western Australia—northern development	. .	. .	577	. .	. .
Replacement of Derby jetty	350	150	. .	. .	. .
Coal loading works	80	120	. .	. .	. .
Total, transport, etc.	*125,478*	*142,550*	*157,766*	*167,627*	*186,525*
Other—					
Exmouth township	. .	380	750	1,952	417
Migrant centres	. .	. .	. .	2	426
Total, other	. .	*380*	*750*	*1,954*	*843*
Total, capital	**142,666**	**182,376**	**199,338**	**218,328**	**254,811**
TOTAL GRANTS					
Grand total	**895,330**	**957,850**	**1,075,596**	**1,183,275**	**1,311,963**

ALL COMMONWEALTH FUNDS: GRANTS TO THE STATES TO 30 JUNE 1968(a)

($ million)

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
Section 87 of Constitution, 1900–01 to 1909–10 . . .	55.5	40.0	17.8	12.4	17.5	5.2	148.4
Surplus Revenue Acts, 1910–11 to 1926–27	83.0	62.3	30.3	19.8	19.5	8.7	223.7
Financial Agreements, 1927–28 to 1967–68	339.2	236.3	125.5	93.4	66.8	37.6	898.8
Special grants(*b*) . . .	..	..	..	156.2	332.8	194.0	683.0
Income tax reimbursement grants, 1942–43 to 1945–46(*c*) . .	110.8	48.7	44.4	18.1	19.0	6.8	247.8
Income tax reimbursement special grants, 1945–46 to 1946–47(*c*)	..	..	..	3.3	1.8	0.2	5.4
Entertainments tax reimbursement grants, 1942–43 to 1945–46(*d*)	1.2	2.8	..	0.7	0.7	0.3	5.7
Tax reimbursement grants, 1947–48 to 1958–59(*e*) . . .	1,051.3	672.1	431.9	240.1	216.9	91.3	2,703.7
Additional tax reimbursement grants(*f*)	4.1	2.3	1.6	0.9	0.8	0.3	10.0
Special financial assistance(*g*) .	160.8	110.6	62.8	34.7	31.2	13.6	413.7
Additional assistance(*h*) . .	4.0	2.1	2.3	0.7	0.6	0.3	10.0
Non-recurring grants from excess receipts, 1934–35 to 1936–37 .	2.4	1.7	0.9	0.5	0.4	0.2	6.0
Financial assistance grants(*i*) .	2,037.0	1,514.4	905.6	687.3	626.6	259.8	6,030.7
Additional financial assistance(*j*)	26.6	21.3	20.0	11.5	7.8	7.8	95.0
Special assistance(*k*) . .	68.6	27.1	51.2	10.5	49.2	13.4	220.0
Grants for road construction, 1922–23 to 1967–68(*l*) . .	463.6	317.1	309.1	188.9	304.7	83.3	1,666.7
Payments to Commonwealth Aid Roads (Supplementary) Trust Account(*m*) . . .	..	..	..	..	..	..	10.0
Tuberculosis Act 1948–reimbursement of capital expenditure .	11.9	4.1	11.4	1.5	4.6	0.7	34.3
Mental institutions—contribution to capital expenditure . .	14.1	10.4	2.3	2.2	2.1	2.6	33.6
Grants to universities . .	143.9	98.7	43.2	39.8	26.2	13.5	365.4
Other education . . .	36.8	33.1	16.0	11.5	11.4	3.7	112.4
Railway projects(*n*) . . .	8.5	22.1	..	28.3	31.8	..	90.8
Total	**4,623.1**	**3,227.4**	**2,076.2**	**1,562.4**	**1,772.5**	**743.3**	**14,014.8**

(*a*) Includes non-recurring grants from excess receipts, but excludes payments on account of the Morgan-Whyalla Waterworks, amounts provided for relief of wheat-growers and other primary producers, and other payments for medical research, social services, etc. (*b*) Under various States Grants Acts. (*c*) Under *States Grants* (*Income Tax Reimbursement*) *Act* 1942. (*d*) Under *States Grants* (*Entertainments Tax Reimbursement*) *Act* 1942. (*e*) Under *States Grants* (*Tax Reimbursement*) *Act* 1946–1948. (*f*) Under *States Grants* (*Additional Tax Reimbursement*) *Act* 1950. (*g*) Under *States Grants* (*Special Financial Assistance*) *Acts* 1951 and 1952. (*h*) Under *States Grants* (*Additional Assistance*) *Act* 1958. (*i*) Under *States Grants Acts* 1959, 1962 and 1965. (*j*) Under *States Grants* (*Additional Assistance*) *Act* 1962. (*k*) Includes payments for unemployment relief, metalliferous mining, forestry, local public works, grants for price control reimbursement, coal strike emergency grant, grants for imported houses, Port Augusta-Port Pirie railway, Western Australia waterworks, cattle tick control, dairy industry extension, agricultural advisory services, cattle roads, coal-loading works, eradication of house borers, brigalow lands, cattle dip chemicals, tobacco industry extension services, Exmouth township, drought assistance, flood mitigation, Gordon River road, investigation of water resources, encouragement of meat production, etc. (*l*) Under Main Roads Development, Federal Aid Roads, Federal Aid Roads and Works, and Commonwealth Aid Roads Acts. (*m*) Expenditure not allocable between States. (*n*) Under the *Railway Standardization* (*South Australia*) *Agreement Act* 1949, the *Railway Standardization* (*New South Wales and Victoria*) *Agreement Act* 1958, the *Railway Agreement* (*Queensland*) *Act* 1961, the *Railway Equipment Agreement* (*South Australia*) *Act* 1961, and the *Railway Agreement* (*Western Australia*) *Act* 1961.

Repayable advances. The next three tables show particulars of the amounts paid to the States as repayable advances for the several purposes referred to in (*b*) on page 707.

ALL COMMONWEALTH FUNDS: ADVANCES TO THE STATES, BY FUNCTION, 1967-68

($'000)

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
Development of resources and assistance to industry—							
Natural disaster payments	3,300	2,709	568	275	..	3,600	10,452
Less Repayments	..	..	..	..	..	..	..
	3,300	*2,709*	*568*	*275*	..	*3,600*	*10,452*
War service land settlement	..	..	..	1,811	2,097	1,304	5,212
Less Repayments	118	126	4	2,248	6,542	5,963	15,002
	−118	*−126*	*−4*	*−437*	*−4,445*	*−4,659*	*−9,790*
Other	5,521	300	2,281	205	1,950	520	10,777
Less Repayments	67	15	224	17	49	8	381
	5,454	*285*	*2,057*	*188*	*1,901*	*512*	*10,396*
Transport and communication—							
Railway projects	..	..	578	1,965	11,446	..	13,989
Less Repayments	96	96	1,150	178	204	..	1,724
	−96	*−96*	*−572*	*1,787*	*11,242*	..	*12,265*
Other	..	..	..	..	..	5,300	5,300
Less Repayments	330	..	632	..	151	..	1,113
	−330	..	*−632*	..	*−151*	*5,300*	*4,187*
Housing	44,610	33,766	12,627	21,000	11,241	6,700	129,943
Less Repayments	4,315	3,943	1,181	1,369	1,091	398	12,297
	40,295	*29,823*	*11,446*	*19,631*	*10,150*	*6,302*	*117,646*
Not allocated to function	−226	611	−14	280	−192	267	726
Less Repayments	..	..	..	..	..	..	..
	−226	*611*	*−14*	*280*	*−192*	*267*	*726*
Total gross advances	53,205	37,386	16,040	25,536	26,542	17,691	176,399
Less Repayments	4,926	4,180	3,191	3,812	8,037	6,369	30,517
Total net advances	**48,279**	**33,206**	**12,849**	**21,724**	**18,505**	**11,322**	**145,882**

Minus sign (—) denotes excess of repayment.

ALL COMMONWEALTH FUNDS: TOTAL ADVANCES TO THE STATES BY FUNCTION, 1963-64 TO 1967-68

($'000)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Development of Resources and Assistance to Industry—					
Natural disaster payments	..	..	11,994	7,720	10,452
Less Repayments	..	..	..	..	..
	..	..	*11,994*	*7,720*	*10,452*
War service land settlement	8,524	7,234	6,358	5,936	5,212
Less Repayments	11,118	11,362	16,210	16,930	15,002
	−2,594	*−4,128*	*−9,852*	*−10,994*	*−9,790*
Other	2,890	5,598	8,903	10,502	10,777
Less Repayments	248	228	195	169	381
	2,642	*5,370*	*8,708*	*10,333*	*10,396*
Transport and Communication—					
Railway projects	17,420	10,388	12,410	12,647	13,989
Less Repayments	276	824	1,387	1,540	1,724
	17,144	*9,564*	*11,023*	*11,107*	*12,265*
Other	2,544	3,376	6,107	2,805	5,300
Less Repayments	156	230	315	494	1,113
	2,388	*3,146*	*5,792*	*2,311*	*4,187*
Housing	104,264	115,116	124,242	127,753	129,943
Less Repayments	8,298	9,248	10,237	11,240	12,297
	95,966	*105,868*	*114,005*	*116,513*	*117,646*
Not allocated to function	..	762	2,600	..	726
Less Repayments	880	..	..	990	..
	−880	*762*	*2,600*	*−990*	*726*
Total gross advances	135,642	142,474	172,615	167,363	176,399
Less Repayments	20,976	21,892	28,344	31,363	30,517
Total net advances	**114,666**	**120,582**	**144,271**	**136,000**	**145,882**

Minus sign (—) denotes excess of repayments.

ALL COMMONWEALTH FUNDS: GROSS ADVANCES TO THE STATES TO 30 JUNE 1968 ($'000)

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
Development of resources and assistance to industry—							
Brigalow lands development	..	..	9,800	..	..	..	9,800
Blowering Reservoir	19,946	..	..	..	..	..	19,946
Natural disaster	17,428	2,709	5,654	275	..	4,100	30,166
Comprehensive water supply	..	..	..	..	4,000	..	4,000
Softwood forestry	1,500	300	682	295	450	520	3,747
Western Australia—northern development	..	..	..	..	900	..	900
Chowilla Reservoir	1,477	..	..	..	..	..	1,477
Agricultural re-establishment loans	5,320	2,080	1,220	928	2,222	600	12,370
War service land settlement	13,542	14,398	..	68,173	102,123	53,411	251,646
Transport and communication—							
Railway projects	104	9,480	35,112	11,929	45,527	..	102,152
Cattle roads	..	..	8,550	..	..	..	8,550
Western Australia—northern development	..	..	..	..	577	..	577
Replacement of Derby jetty	..	..	..	..	800	..	800
Coal loading works	3,299	..	200	..	..	..	3,499
Harbours	..	..	3,270	..	..	..	3,270
Power, fuel and light	..	..	..	..	..	5,300	5,300
Housing	574,030	494,003	153,158	211,179	143,327	71,251	1,646,945
Not allocated to function	1,961	2,596	1,036	1,260	487	768	8,109
Total	**638,607**	**525,565**	**218,682**	**294,039**	**300,413**	**135,949**	**2,113,254**

The figures in the table above represent gross advances, and take no account of repayments made by the States.

Contributions under Financial Agreement. Details of the Financial Agreement between the Commonwealth and the States are given in Year Book No. 37, pages 685–90. Under this Agreement the Commonwealth undertook to contribute $15,169,824 per annum towards interest payable on the State loan securities for a period of 58 years from 1 July 1927. This amount is distributed among the States as follows: New South Wales, $5,834,822; Victoria, $4,254,318; Queensland, $2,192,470; South Australia, $1,407,632; Western Australia, $946,864; Tasmania, $533,718. These amounts are equal to the sums paid by the Commonwealth to each State in the year 1926–27 at the rate of $2.50 per head of population, the rate at which the Commonwealth had contributed annually to the States since 1 July 1910 as compensation for the States relinquishing, after federation, the right to levy customs and excise duties.

In addition, under the Financial Agreement the Commonwealth agreed to make certain contributions to the National Debt Sinking Fund for redemption of State loan securities. Details of these are given on pages 761–3 of this chapter.

Special grants to the States. The Constitution provides in Section 96 for the granting of special financial assistance to the States. The Commonwealth Grants Commission inquires into and reports upon claims made by any State for a grant of financial assistance and any matters relevant thereto. The recommendations of the Commission in respect of the years 1964–65 to 1968–69 are shown in their two parts in the following table. One part is the Commission's estimate of the indispensable need of the claimant State for the year in which the payment is to be made after allowing a sufficient margin for safety. The other part is an adjustment of this estimate for an earlier year after an examination of the audited accounts for that year. Thus the grants for 1968–69 include an estimate of the indispensable need of the claimant State for 1968–69 and an adjustment to the estimated grant for 1966–67.

Under the provisions of the *States Grants Act* 1965–1967, the financial assistance grant paid to each State is determined by increasing the grant paid to that State for previous financial year (with the addition of $2,000,000 to the grant paid to Queensland in each year up to 1969–70) in accordance with a formula using the percentage change of the population of the State during the year ending 31 December of the year of payment, the percentage increase in average wages for Australia as a whole for the year ended 31 March of the year of payment, and a betterment factor of 1.2 per cent.

COMMONWEALTH GRANTS COMMISSION: GRANTS RECOMMENDED, 1964-65 TO 1968-69
($'000)

	1964–65	1965–66	1966–67	1967–68	1968–69
Western Australia—					
Advance grant	15,800	21,000	14,700	15,500	. .
Completion grant(a)	1,320	3,038	4,706	18	582
Net grant recommended	*17,120*	*24,038*	*19,406*	*15,518*	*582*
Tasmania—					
Advance grant	13,618	16,400	19,500	19,000	18,000
Completion grant(a)	982	1,332	1,166	889	−1,190
Net grant recommended	*14,600*	*17,732*	*20,666*	*19,889*	*16,810*
Grand total	**31,720**	**41,770**	**40,072**	**35,407**	**17,392**

(a) Adjustment to estimated grant paid two years previously.

Natural disasters. Under the States Grants (Drought Assistance) Acts, New South Wales, Victoria, Queensland and South Australia have been given Commonwealth financial assistance to relieve the effects of drought. In addition, the Commonwealth is assisting those States to meet budgetary problems arising from the effects of drought on their revenues.

Under the *Tasmania Grant* (*Fire Relief*) *Act* 1967, the Commonwealth provided for a maximum grant of $14,500,000 as well as for loans where the State makes loans to assist in the rehabilitation and restoration for damage caused by bushfires in February 1967.

Grants for road construction. Details of the *Main Roads Development Act* 1923–1925, *Federal Aid Roads Acts* 1926, 1931 and 1936, *Federal Aid Roads and Works Act* 1937, *Commonwealth Aid Roads and Works Act* 1947–1949, *Commonwealth Aid Roads Act* 1950, *Commonwealth Aid Roads Act* 1954, *Commonwealth Aid Roads* (*Special Assistance*) *Act* 1957, and *Commonwealth Aid Roads Act* 1959 are given in earlier issues of the Year Book (*see* No. 38, pages 787–8, No. 41, page 621, No. 46, page 838, and No. 51, page 922) and in the annual bulletin *Commonwealth Finance.* For details of the present scheme of Commonwealth assistance to the States for roads under the *Commonwealth Aid Roads Act* 1964 which is to expire at the end of 1968–69. (*See* Official Year Book No. 54 page 744).

Beef cattle roads. The States Grants (*Beef Cattle Roads*) *Act* 1968 provides for grants of $39,500,000, $9,500,000, and $1,000,000 for Queensland, Western Australia, and South Australia respectively for a further programme of beef cattle road construction over a period of seven years commencing from 1 July 1967.

Health reimbursement under Tuberculosis Act 1948. The *Tuberculosis Act* 1948 provided for the reimbursement by the Commonwealth of capital and maintenance expenditure incurred by the States in the provision of facilities for the diagnosis, treatment and control of tuberculosis. Re-imbursements from the National Welfare Fund of maintenance expenditure on tuberculosis hospitals are classified as cash benefits under Health and Welfare expenditure, and they equal the amounts by which such expenditures of the States in any financial year exceed those for the year 1947–48. As from 1 July 1948 the States have also been reimbursed from annual appropriations of the Department of Health for all their capital expenditure on buildings, furnishings, equipment, and plant.

The *States Grants* (*Mental Health Institutions*) *Act* 1964–1967 authorised assistance to the States amounting to one-third of their total expenditure on building and equipping approved mental health institutions during the six years ending 30 June 1970.

Education. Payments to the States for universities were first introduced in 1951–52, and details of the States Grants (Universities) Acts under which they were continued are given in earlier issues of the Year Book (*see* No. 51 page 923 and No. 52 page 770). The *Universities* (*Financial Assistance*) *Act* 1967 authorised grants totalling approximately $175,600,000 for the Commonwealth share of the agreed programme of development of State Universities for the years 1967 to 1969. (*See also* the chapter Education, Cultural Activities, and Research, pages 515–21.)

Colleges of Advanced Education. Under the States Grants (Advanced Education) Acts, the Commonwealth is providing financial assistance to the States for recurrent and capital expenditures of Colleges of Advanced Education.

The *States Grants (Science Laboratories) Act* 1968 extends for the three years ending 30 June 1971 the operation of the scheme outlined in Official Year Book No. 54 page 745. A total payment of $37.7m is provided for and not more than one-third may be authorised for payment before 30 June 1969 and two-thirds before 30 June 1970.

Grants for buildings and equipment for use in technical training in schools and colleges conducted by States only are provided for under the *States Grants (Science Laboratories and Technical Training) Act* 1964 and the *States Grants (Technical Training) Act* 1965–1966.

Under the *States Grants (Research) Act* 1966 the Commonwealth is making available during the 1967–1969 triennium $9,000,000 to support selected research projects.

Under the *States Grants (Teachers Colleges) Act* 1967 the Commonwealth is providing a maximum amount of $24,000,000 over the three years ending 30 June 1970 for the construction and equipping of teachers colleges.

Under the *States Grants (Secondary School Libraries) Act* 1968 grants totalling $27m are to be made to the States over the three years commencing 1 January 1969 to finance buildings and associated capital facilities for libraries in government and non-government secondary schools.

The *States Grants (Pre-school Teachers Colleges) Act* 1968 provides for capital grants totalling $2.5m over the three financial years commencing 1968–69 for the purpose of increasing the physical capacity of approved pre-school teachers colleges.

Railway projects

The *Railway Agreement (New South Wales) Act* 1968 provides for a contribution of $10m towards the cost of improving the existing railway from Parkes to Broken Hill as a work necessary to provide a uniform gauge railway across Australia.

Other railway projects. The Commonwealth is also continuing to provide financial assistance to South Australia and Western Australia under its railway standardisation agreements with those two States.

Water resources

Investigation and measurement of water resources. The States Grants (Water Resources Measurement) Act 1967 authorised payments to the States of up to $4,500,000 during the three years ending 30 June 1970 to assist State programmes of water measurement and investigation of underground water resources.

Chowilla Reservoir. As further work on this project was suspended in August 1967 pending a reassessment by the River Murray Commission of the relationship between costs and benefits of the scheme, Commonwealth assistance has been confined to meeting contractual commitments already entered into by the constructing authority. A number of operational studies were proceeding at 30 June 1968 including an assessment of the likely yield benefits from both Chowilla and any alternative storage on the Upper Murray in catchments controlled by the River Murray Commission.

Maraboon Dam. The Queensland Grant (Maraboon Dam) Act 1968 provides for grants to Queensland of up to $20,000,000 for the construction of a dam on the Nogoa River near Emerald.

Ord River Irrigation Project. The Western Australia (Ord River Irrigation) Act 1968 provides for financial assistance to Western Australia on the basis of grants for dam construction and interest-bearing loans in respect of the irrigation works.

River Murray salinity reduction. The *Victoria Grant (River Murray Salinity) Act* 1968 provides for grants to Victoria of up to $3,600,000 for two salinity reduction projects on the River Murray.

Flood mitigation, New South Wales. Commonwealth payments under the *New South Wales Grant (Flood Mitigation) Act* 1964–1968 are limited to $8,000,000 in respect of flood mitigation works on the Macleay, Clarence, Richmond, Tweed, Shoalhaven, and Hunter Rivers. The Commonwealth grants will match State expenditure which, in turn, will be in a prescribed ratio to local authority expenditure on flood mitigation works.

Blowering Reservoir, New South Wales. The Blowering Reservoir is to be constructed at the expense of the State of New South Wales mainly by the Snowy Mountains Hydro-electric Authority, and the Commonwealth will finance half the cost in the form of repayable interest-bearing loans to that State.

Under the *Western Australia (South-west Region Water Supplies) Agreement Act* 1965, the Commonwealth is providing financial assistance of up to $10,500,000 by way of interest-bearing loans to Western Australia to accelerate works undertaken by the State to extend the comprehensive water supply scheme in the south-west portion of the state.

Other specific purpose payments

Brigalow lands. Under the Brigalow Lands Agreement Acts Commonwealth advances to the State of Queensland for specified works associated with the production of beef cattle and other primary products in the Fitzroy River Basin and the supply of beef for export are fixed at an overall limit of $23,000,000. Repayments over a twenty-year period are to commence in 1968 in respect of advances made prior to 1 July 1967 and in 1971 in respect of advances made from 1 July 1967.

Development of Exmouth township, Western Australia. In 1967–68 the Commonwealth contributed an amount of $417,000 to the Western Australian Government towards the cost of developing a township at Exmouth in connection with the United States Communications Base being established at North West Cape.

Weipa development, Queensland. Under the *Weipa Development Agreement Act* 1965 the Commonwealth provided financial assistance of $3,270,000 during 1965–66 and 1966–67 to Queensland by way of interest-bearing advances to finance harbour works carried out at Weipa on Cape York Peninsula.

Natural gas pipeline, South Australia. Under the *Natural Gas Pipeline (South Australia) Agreement Act* 1967 the Commonwealth is providing a maximum of $15,000,000 by way of interest-bearing loans to help finance the construction of a pipeline to transport gas from natural gas fields at Gidgealpa and Moomba.

Softwood forestry. The *Softwood Forestry Agreement Act* 1967 authorises the Commonwealth to provide assistance during the five years ending 30 June 1971 for increased planting of softwood forests. Total assistance of the order of $20,000,000 is in the form of interest-bearing loans repayable over twenty-five years.

The *Tasmania Agreement (Hydro-Electric Power Development) Act* 1968 provides for interest-bearing loans with an overall limit of $47m to Tasmania for the financing of a five-year programme of accelerated hydro-electric development based on the commencement of development of the Gordon River area in the south west of the State.

War service land settlement

The following section deals with the financial operations of the War Service Land Settlement Division of the Department of Primary Industry. This information was formerly included in the chapter Land Settlement and Tenure (*see* Year Book No. 52, page 80). Additional information concerning the operations of the Division appears in Chapter 21, Rural Industry.

WAR SERVICE LAND SETTLEMENT: COMMONWEALTH EXPENDITURE, STATES TO 30 JUNE 1968
($'000)

Advances to States	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
For acquisition of land . .	..	..	..	6,837	7,093	5,069	18,998
For development and improvement of land	..	..	..	30,330	39,434	35,593	105,357
Special loans	13,542	14,397	..	..	..	..	27,939
Commonwealth contributions to excess cost over valuation .	1,291	13,145	232	5,146	8,606	12,154	40,575
To provide credit facilities to settlers	..	..	..	33,198	55,517	13,792	102,507
For remission of settlers' rent and interest	874	378	72	703	1,061	569	3,659
For payment of living allowances to settlers	2,020	2,433	326	854	960	441	7,034
For operation and maintenance of irrigation projects . . .	..	..	..	2,990	32	10	3,031
Loss on advances . . .	630	15	640	256	472	194	2,206
Cost of administration of credit facilities	..	..	..	1,563	2,184	689	4,437
Concessions and rebates for King Island	..	..	..	..	..	374	374
Total	**18,357**	**30,368**	**1,271**	**81,879**	**115,359**	**68,884**	**316,118**

Loans and Allowances (Agricultural Occupations) Scheme

Full details of the measures taken for the re-establishment of ex-servicemen in rural occupations were given in earlier Year Books (*see* List of Special Articles, etc., preceding General Index to this volume). These measures provide for a scheme of loans and allowances to assist ex-servicemen in establishing themselves in agricultural occupations. The loans are made to eligible ex-servicemen for the purchase of land, effecting improvements on land, the acquisition of tools of trade, livestock, plant or equipment, the establishment of a co-operative business with other persons, reduction or discharge of a mortgage, bill of sale, etc. At 30 June 1968, 14,307 loans had been approved, and advances amounting to $20,357,000 had been made. The allowances are payable only in respect of the period during which the income derived from the occupation by the ex-serviceman concerned is considered inadequate. At 30 June 1968, 16,114 applications for allowances had been made, and the total amount paid in allowances was $4,553,000.

Year Book No. 48 (page 98) contains details of the applications received and approved and the amounts involved for the individual States and Territories to 30 June 1961. There has been little subsequent change.

War Service Land Settlement Branch—total expenditure

The following table shows the total expenditure on various projects by the War Service Land Settlement Branch to 30 June 1968.

COMMONWEALTH WAR SERVICE LAND SETTLEMENT BRANCH: EXPENDITURE STATES AND TERRITORIES TO 30 JUNE 1968

($'000)

Project	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total expenditure*	*Receipts and repayments*	*Net expenditure*
War service land settlement expenditure from revenue or loan funds	18,357	30,368	1,271	81,879	115,359	68,884	316,118	(a)124,170	191,948
Agricultural loans(b) .	8,568	3,594	1,748	1,654	3,947	812	(c)20,358	(d)19,555	803
Agricultural allowances.	1,160	592	956	650	962	232	(e)4,554	..	4,554
Administration expenses	1,663	349	141	207	826	100	3,286	..	3,286
Rural training . .	660	1,008	212	380	454	216	2,930	298	2,632
Total . . .	**30,408**	**35,911**	**4,328**	**84,770**	**121,548**	**70,244**	**(f)347,246**	**(g)144,023**	**203,223**

(a) Excludes interest, rent, and rates, $32,568,000. (b) Includes expenditure on new loans of money repaid by borrowers. (c) Includes Northern Territory, $20,000 and New Guinea, $14,000. (d) Excludes interest, $3,062,000. (e) Includes New Guinea, $3,000. (f) Includes Northern Territory, $20,000 and New Guinea, $17,000. (g) Excludes interest, rent, and rates, $32,568,000.

All Commonwealth funds: receipts

Commonwealth taxation

Taxation constitutes the main sources of Commonwealth revenue, accounting for almost 90 per cent in 1967–68. The following tables show details of taxation receipts from each source during the years 1963–64 to 1967–68 and their proportions of the totals.

ALL COMMONWEALTH FUNDS: TAXATION RECEIPTS, 1963-64 TO 1967-68

($'000)

Source of receipts	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Income tax—					
Individuals	1,271,063	1,569,483	1,729,439	1,920,603	2,175,249
Companies	586,260	709,044	801,105	784,544	836,664
Dividend (withholding) . . .	15,936	16,039	17,247	22,708	21,716
Interest (withholding)	..	..	..	..	910
Customs	232,497	268,400	270,871	274,873	312,220
Excise	582,464	631,242	751,960	806,509	855,308
Sales tax	325,189	362,857	370,044	380,673	416,621
Pay-roll tax	136,443	150,078	161,943	172,232	184,416
Estate duty	39,871	41,531	36,124	41,534	54,717
Gift duty	6,488	7,308	6,195	7,658	8,543
Primary production and other charges .	4,007	4,808	13,041	14,575	17,021
Stevedoring industry charge . . .	10,321	10,411	9,531	9,758	14,259
Wheat tax	638	720	591	1,081	633
Wool tax	6,359	13,987	15,201	14,869	13,694
Broadcasting stations' licence fees . .	235	226	218	209	258
Television stations' licence fees. . .	232	28	1,620	963	1,185
Other	2,138	2,262	3,218	3,177	3,245
Total	**3,220,140**	**3,788,423**	**4,188,348**	**4,455,966**	**4,916,658**

COMMONWEALTH TAXATION: PROPORTION OF EACH CLASS TO TOTAL NET COLLECTIONS, 1963-64 TO 1967-68

(Per cent)

Type of tax	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Income taxes	58.2	60.5	60.8	61.2	61.7
Customs	7.2	7.1	6.5	6.2	6.4
Excise	18.1	16.6	18.0	18.1	17.4
Sales tax	10.1	9.6	8.8	8.5	8.5
Pay-roll tax	4.2	4.0	3.9	3.9	3.8
Estate duty	1.2	1.1	0.9	0.9	1.1
Gift duty	0.2	0.2	0.1	0.2	0.2
Primary production and other charges	0.1	0.1	0.3	0.3	0.4
Stevedoring industry charge	0.3	0.3	0.2	0.2	0.3
Wool tax	0.2	0.4	0.4	0.3	0.3
Other	0.2	0.1	0.1	0.1	0.1
Total taxation	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Customs and excise receipts

COMMONWEALTH CUSTOMS REVENUE: CLASSIFICATION OF NET RECEIPTS, 1963-64 AND 1964-65

($'000)

Class	*1963–64*	*1964–65*
Foodstuffs of animal origin	1,464	1,564
Foodstuffs of vegetable origin	4,909	3,210
Spirituous and alcoholic liquors	12,670	14,709
Tobacco, cigars and cigarettes	26,401	27,596
Animal substances (not foodstuffs)	12	13
Vegetable substances and fibres	599	630
Yarns, textiles and apparel	33,582	39,400
Oils, fats and waxes	21,696	20,718
Pigments, paints and varnishes	765	759
Rocks and minerals	236	17
Metals, metal manufactures and machinery	74,074	91,644
Rubber and leather and manufactures thereof	3,502	5,502
Wood and wicker, raw and manufactured	4,379	6,393
Earthenware, cement, china, glass, and stoneware	5,954	6,742
Pulp, paper and board, paper manufacture, and stationery	5,608	6,476
Sporting materials, toys, fancy goods, jewellery, and timepieces	7,515	8,853
Optical, surgical and scientific instruments, photographic goods	3,836	4,769
Chemicals, pharmaceutical products, essential oils, and fertilisers	6,066	6,228
Miscellaneous goods	13,904	16,905
Primage	4,638	5,465
Other receipts	764	887
All classes	*232,572*	*268,480*
Less Remission of duty under special circumstances	75	80
Total	**232,497**	**268,400**

CUSTOMS DUTIES ACCORDING TO BRUSSELS TARIFF DIVISIONS(a), 1965-66 TO 1967-68
($'000)

Source of receipts	*1965–66*	*1966–67*	*1967–68*
Live animals; animal products	1,155	1,040	911
Vegetable products	1,755	1,797	1,268
Animal and vegetable fats and oils and their cleavage products; prepared edible fats; animal and vegetable waxes	1,923	2,440	1,578
Prepared foodstuffs; beverages, spirits and vinegar; tobacco	43,656	47,149	51,278
Mineral products	19,394	9,488	5,688
Products of the chemical industry and allied industries	10,420	12,340	11,438
Artificial resins and plastic materials, cellulose esters and ethers, and articles thereof; rubber, synthetic rubbers, factice and articles thereof	11,781	12,278	15,457
Raw hides and skins, leather, furskins and articles thereof; saddlery and harness; travel goods, handbags and similar containers; articles of gut (other than silk-worm gut)	1,962	2,409	2,688
Wood and articles of wood; wood charcoal; cork and articles of cork; manufactures of straw, of esparto and of other plaiting materials; basketware and wickerwork	6,627	6,902	8,111
Paper-making material; paper and paper-board and articles thereof	6,838	7,545	8,437
Textiles and textile articles	34,952	38,019	44,447
Footwear, headgear, umbrellas, sunshades, whips, riding-crops and parts therefor; prepared feathers and articles made therewith; artificial flowers; articles of human hair; fans	3,193	4,362	5,760
Articles of stone, of plaster, of cement, of asbestos, of mica and of similar materials; ceramic products; glass and glassware	7,272	7,346	8,343
Pearls, precious and semi-precious stones, precious metals, rolled precious metals, and articles thereof; imitation jewellery; coin	1,187	1,200	1,375
Base metals and articles of base metal	18,606	18,321	21,303
Machinery and mechanical appliances; electrical equipment; parts therefor	47,052	44,813	55,172
Vehicles, aircraft, and parts therefor; vessels and certain associated transport equipment	25,575	29,280	39,212
Optical, photographic, cinematographic, measuring, checking, precision, medical and surgical instruments and apparatus; clocks and watches, musical instruments; sound recorders and reproducers; television image and sound recorders and reproducers, magnetic; parts therefor	8,880	9,054	11,141
Arms and ammunition; parts therefor	466	473	327
Miscellaneous manufactured articles	8,537	8,422	8,684
Works of art, collector's pieces and antiques	−5	5	3
Miscellaneous	4,366	4,613	3,970
Primage	5,420	5,799	5,668
Total, customs duties and primage	*271,010*	*275,095*	*312,258*
Less Remission of duty under special circumstances	139	222	38
Total	**270,871**	**274,873**	**312,220**

(a) Following the adoption as from 1 July 1965 of the Brussels Tariff Nomenclature in the new Australian Customs Tariff, the source of customs duties is shown under the heads of the sections of Customs Tariff. In earlier years, collections of customs duties were shown by statistical classes—*see* preceding table.

COMMONWEALTH EXCISE REVENUE: CLASSIFICATION OF NET RECEIPTS 1963-64 TO 1967-68

($'000)

Source of revenue	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Beer	247,169	260,214	302,104	320,832	338,614
Potable spirits	18,306	19,207	22,871	24,873	26,783
Tobacco	18,710	17,795	18,070	17,040	16,460
Cigars and cigarettes	146,199	171,073	199,740	201,051	214,315
Cigarette papers	1,013	901	858	824	836
Petrol	135,974	148,194	190,670	220,639	234,210
Diesel fuel	7,665	9,099	13,597	15,481	18,256
Matches	2,288	2,276	2,267	2,167	2,227
Playing cards	104	106	114	112	119
Coal	585	599	621	634	642
Cathode ray tubes	3,911	605	. .	. .	. .
Canned fruit	402	1,092	1,092	1,263	1,741
Miscellaneous	42	1	−68	1,530	1,157
All items	*582,369*	*631,162*	*751,936*	*806,445*	*855,360*
Diesel fuel taxation	319	309	265	362	304
Less Rebates	224	229	241	298	356
	95	*80*	*24*	*64*	*−52*
Total	**582,464**	**631,242**	**751,960**	**806,509**	**855,308**

Primary production and other charges

COMMONWEALTH PRIMARY PRODUCTION AND OTHER CHARGES: RECEIPTS 1963-64 TO 1967-68

($'000)

Source of revenue	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Apple and pear export charge	251	213	272	207	211
Butter fat levy	. .	. .	1,812	2,120	1,936
Canned fruit export charge	183	176	223	224	326
Canning fruit charge	61	102	120	116	123
Cattle slaughter levy	879	298	. .	. .	. .
Dairy produce export charge	527	674	5	. .	. .
Dairy produce levy	793	817	31	. .	. .
Dried fruits export charge	118	155	193	159	143
Dried vine fruits contributory charge—					
Currants	. .	. .	72	52	. .
Raisins	. .	. .	165	. .	42
Sultanas	. .	. .	1,530	. .	139
Egg export charge	56	82	20	5	4
Honey levy	81	104	101	92	96
Livestock slaughter levy—					
Cattle	. .	1,157	1,441	1,315	1,314
Sheep and lambs	. .	299	399	809	1,063
Meat export charge	486	103	. .	. .	. .
Poultry industry levy	. .	. .	6,000	8,859	10,840
Tobacco charge	348	354	369	239	427
Wine export charge	224	274	288	380	357
Total	**4,007**	**4,808**	**13,041**	**14,575**	**17,021**

Other Commonwealth taxation

Taxes other than customs and excise duties, the various export charges and some taxes on particular commodities are assessed and collected by the Commissioner of Taxation. The Commissioner's organisation comprises a head office in Canberra, an office in each State assessing the returns of taxpayers whose interests are restricted to that State, and a central office situated in Melbourne assessing taxpayers whose interests are in the Australian Capital Territory or are in more than one State.

Details of the purposes and rates applicable to the main forms of Commonwealth taxation, excluding customs and excise, currently imposed and of current legislation are given in the following pages. Historical information is given in Year Book No. 51, pages 905–10, and in earlier issues.

Taxes on income are treated separately on pages 763–73 and customs and excise duties are dealt with in the chapter Overseas Transactions. For detailed statistics relating to Commonwealth income taxes, estate duty, gift duty, and sales tax *see* the annual bulletin *Commonwealth Taxation Assessments.*

Sales tax. The general rate of tax levied on all goods other than those specified in the schedules to the *Sales Tax (Exemptions and Classifications) Act* 1935–1968 was raised from 12½ per cent to 15 per cent from 14 August 1968 and goods subject to special rates were taxed at the rates of 2½ and 25 per cent.

Particulars of the net amount of sales tax payable and the sales of taxable and exempt goods in each State for 1967–68 are given in the following table. The figures relate to sales during the period 1 July to 30 June. The figures for sales tax payable differ from those for net collections shown on page 717 because the latter include some adjustments in respect of earlier tax years and relate to tax payable on returns lodged during the year, which in general cover sales for the period June to May.

COMMONWEALTH SALES TAX AND AMOUNT OF SALES: STATES AND TERRITORIES 1967-68

($'000)

	N.S.W.(a)	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*Aust.*
Net sales on which sales tax was payable at—								
2½ per cent .	248,455	226,091	75,020	52,564	64,832	13,092	479	680,535
12½ per cent .	656,784	449,954	194,711	120,124	120,485	30,182	3,664	1,575,904
25 per cent .	333,714	246,616	104,467	69,659	63,281	20,329	966	839,031
Total net sales	*1,238,953*	*922,661*	*374,198*	*242,347*	*248,599*	*63,604*	*5,108*	*3,095,470*
Sales of exempt goods by registered persons	3,546,898	2,377,485	1,045,341	603,292	570,125	230,756	19,996	8,393,891
Total sales of taxable and exempt goods .	**4,785,851**	**3,300,146**	**1,419,539**	**845,639**	**818,723**	**294,359**	**25,104**	**11,489,361**
Sales tax payable .	171,738	123,551	52,331	33,744	32,502	9,182	711	423,759

(*a*) Includes Australian Capital Territory.

Sales of taxable and exempt goods and sales tax payable for Australia as a whole are shown in the following table for the years 1963-64 to 1967–68.

COMMONWEALTH SALES TAX AND AMOUNT OF SALES AUSTRALIA, 1963-64 TO 1967-68

($ million)

Year of sale	*Net sales on which sales tax was payable*	*Sales of exempt goods by registered persons*	*Total sales of taxable and exempt goods*	*Sales tax payable*
1963–64 . .	2,393	6,116	8,509	329
1964–65 . .	2,589	6,819	9,408	365
1965–66 . .	2,645	7,112	9,757	367
1966–67 . .	2,838	7,802	10,640	386
1967–68 . .	3,095	8,394	11,489	424

In the foregoing tables sales include goods transferred to stock for sale by retail, goods imported by persons other than registered taxpayers, and goods used in the business of the taxpayer. Exempt sales relate to goods exempted from sales tax under the *Sales Tax (Exemptions and Classifications) Act* 1935–1968. The figures shown do not represent the total sales of all commodities, as vendors trading only in exempt goods are not required to be registered, and consequently the volume of their sales is not included in the statistics above. In addition, non-taxable sales (i.e. goods sold by one registered taxpayer to another registered taxpayer) are excluded.

Pay-roll tax came into operation on 2 May 1941 and provided for the imposition of a tax on wages accruing after 30 June 1941. The relevant laws are *Pay-roll Tax Assessment Act* 1941–1968, *Pay-roll Tax Act* 1941–1966, and Pay-roll Tax Regulations. From 1 September 1957 pay-roll tax of 2½ per cent (rate unchanged since its inception) was payable by employers on all wages and salaries in excess of $400 a week or $20,800 per annum. Collections of pay-roll tax amounted to $172,232,000 in 1966–67 and $184,416,000 in 1967–68.

The *Payroll Tax Assessment Act* 1968 continues for five years until 30 June 1973, with some important modifications, the operation of the payroll tax rebate which was introduced in 1961 as an export incentive and which expired on 30 June 1968.

A rebate of payroll tax is available in certain circumstances to employers who increased the level of their annual export sales above their average annual export sales in a base period. For export sales up to 30 June 1968 the base period was the two years ended 30 June 1960. From 1 July 1968 the base period is represented by the first three years of the eight year period preceding the rebate year. A special formula applies in the case of a new exporter by which a person who did not export in any of the three years ended on 30 June 1961 progressively reaches the same position as an established exporter. The rebate is equivalent to 10.5 per cent of the increase in exports for the rebate year over the average annual exports in the base period.

Estate duty. Under the *Estate Duty Assessment Act* 1914–1967 estate duty is assessed on the net value of the estate less a statutory exemption determined in accordance with the following formula, applying from 31 October 1963: (*a*) where the whole of the estate passes to the widow or widower, children (including adopted children, step-children and ex-nuptial children), or grand-children of the deceased, the sum of $20,000 decreasing by $2 for every $8 by which the value exceeds $20,000 and ceasing to apply at $100,000; (*b*) where no part of the estate passes to the widow or widower, children or grand-children, the sum of $10,000 decreasing by $2 for every $8 by which the value exceeds $10,000 and ceasing to apply at $50,000; and (*c*) where only part of the estate passes to the widow or widower, children or grand-children, an amount calculated proportionately under (*a*) and (*b*). Special exemptions are also allowed in respect of estates of defence personnel who die on active service or within three years of termination of their active service from injuries received or diseases contracted while on active service, and prescribed personal property held in Australia by certain United States personnel who are in Australia solely for purposes connected with projects of the United States Government. A rebate of duty may be allowable if the deceased was a beneficiary in an estate (upon which duty is payable or has been paid) of a person who predeceased him by not more than five years.

The rates of duty levied under the *Estate Duty Act* 1914–1966 increase as the value of the estate for duty increases, as follows: does not exceed $20,000, 3 per cent; $20,001 to $40,000, 3 per cent to 6 per cent; $40,001 to $240,000, 6 per cent to 26 per cent; $240,001 to $1,000,000, 26 per cent to 27.9 per cent; $1,000,000 or more, 27.9 per cent.

Particulars of the number and value of estates and duty assessed, for each of the assessment years 1964–65 to 1968–69, are given in the following table.

COMMONWEALTH ESTATE DUTY ASSESSMENTS, 1964-65 TO 1968-69

		1964–65	*1965–66*	*1966–67*	*1967–68*	*1968–69*
Estates	No.	12,423	10,948	12,056	14,489	14,105
Gross value as assessed	$'000	602,216	587,488	664,034	840,226	841,462
Deductions(*a*)	„	116,821	117,304	131,930	168,106	162,834
Statutory exemption	„	92,641	109,468	127,602	155,800	152,206
Dutiable value	„	392,754	360,715	404,502	516,320	526,422
Net duty assessed	„	40,935	38,410	43,817	57,711	64,045
Average dutiable value	$	31,615	32,948	33,552	35,635	37,322
Average duty assessed per estate	$	3,295	3,508	3,634	3,983	4,541

(*a*) Debts, Exempt Estate and State Probate Succession Duties.

Gift duty. The *Gift Duty Act* 1941–1966 and the *Gift Duty Assessment Act* 1941–1967 impose a gift duty on gifts made after 29 October 1941. A gift is defined as any disposition of property which is made otherwise than by will, without adequate consideration in money or money's worth. There is a liability on both the donor and the donee to furnish a return, and both are jointly and severally liable for payment of the duty. However, if a return is furnished by the donor, the donee is relieved of this obligation.

Certain exemptions from duty are provided by the Assessment Act, the more important being: payments to an employees' superannuation or like fund; retiring allowances or gratuities granted to employees; gifts to non-profit organisations; gifts to the Commonwealth or a State; and small gifts not exceeding $100.

The rate of gift duty applicable to any particular gift is fixed by reference to the total value of all gifts made by the same donor within the period of eighteen months before and eighteen months after the time of making that gift. Where the total value of all gifts as defined does not exceed $4,000, no duty is payable; The present rates of duty are (*a*) $4,001 to $20,000, 3 per cent provided that the gift duty payable shall not exceed half the amount by which the gift exceeds $4,000, or a proportionate amount where more than one gift is involved; (*b*) $20,001 to $40,000, 3 per cent to 6 per cent; (*c*) $40,001 to $240,000, 6 per cent to 26 per cent; (*d*) $240,001 to $1,000,000, 26 per cent to 27.9 per cent; and (*e*) $1,000,000 or more, 27.9 per cent.

Particulars of the number of gift duty assessments, value of gifts as assessed and duty assessed for each of the assessment years 1964–65 to 1968–69 are given in the following table.

COMMONWEALTH GIFT DUTY ASSESSMENTS, 1964-65 TO 1968-69

		1964–65	*1965–66*	*1966–67*	*1967–68*	*1968–69*
Assessments	No.	8,306	7,516	8,946	9,293	10,053
Value as assessed	$'000	124,709	111,658	130,771	150,322	163,476
Duty assessed	,,	6,870	5,911	7,633	8,701	9,501

Wool tax. The present rate of wool tax is 2 per cent of the sale value of the wool and this rate has operated since 1 July 1965.

Wheat export charge and wheat tax. The *Wheat Export Charge Act* 1968 repealed the *Wheat Export Charge Act* 1963–1966 and provided for an export charge on wheat and wheat products for the seasons 1968–69 to 1972–73 inclusive. The charge which may be levied is the excess of the export price over the sum of the guaranteed price and five cents per bushel, the maximum charge being 15 cents per bushel. Under the *Wheat Industry Stabilization Act* 1968, to which the Wheat Export Charge Act is complementary, the Commonwealth Government guarantees a return to wheat-growers of 145 cents per bushel for fair average quality bulk wheat, free on board vessel on up to 200 million bushels of wheat harvested each season exported from Australia. Collections from the wheat export charge are paid into the Wheat Prices Stabilization Fund, out of which payments are made to the Australian Wheat Board, when required, for the purpose of building up the average export price for any season to the guaranteed price in respect of exports up to 200 million bushels. When the fund is exhausted (as it was at 30 June 1968) payments will be made as necessary from the Consolidated Revenue Fund. As the return from exports has been below the guaranteed price, there have been no collections of the wheat export charge since the 1956–57 (No. 20) Pool, when $3,178,000 was collected, The *Wheat Tax Act* 1957–1966 imposes a tax of three-tenths of a penny (0.25 cents) for each bushel of wheat delivered to the Wheat Board on or after 1 October 1965. (*See also* the chapter Rural Industry).

Miscellaneous export charges. These consist of charges levied on exports of apples and pears (*Apple and Pear Export Charges Act* 1938–1968), canned fruits (*Canned Fruits Export Charges Act* 1926–1966), dried fruits (*Dried Fruits Export Charges Act* 1924–1965), and eggs (*Eggs Export Charges Act* 1947–1965).

Stevedoring Industry Charge. The rates in operation since 27 November 1967 have been as follows:

Class of Waterside Worker	*Rate* $
A	16.85 per man-week
B	0.80 per man-hour
C	0.55 per man-hour

Class A waterside workers are regular waterside workers on weekly hire in permanent and non-permanent continuous ports. Class B are regular casual workers in non-permanent continuous ports and Class C are regular casual workers in non-continuous and seasonal ports and irregular workers in all ports.

Tobacco charge. The rates of tobacco charge currently in force are as follows:

(*a*) in respect of leaf sold to a manufacturer:
  (i) one half cent per pound of leaf, payable by the grower or other persons who own the leaf immediately before sale, and
  (ii) one cent per pound of leaf, payable by the manufacturer;
(*b*) in respect of leaf grown and used by grower-manufacturers:
  (i) where the manufacturer grows nine-tenths of the leaf used by him—one half cent per pound of leaf,
  (ii) in other cases—one cent per pound of leaf.

(*See also* the chapter Rural Industry.)

Dairy produce and butterfat levies. The *Butter Fat Levy Act* 1965–1966, which superseded the *Dairy Produce Levy Act* 1958, and the *Dairy Produce Export Charge Act* 1924–1962 provide for a maximum rate of $0.60 per hundredweight of butterfat content of specified dairy produce and for the apportionment of the proceeds between overseas marketing (40 per cent), local promotion (40 per cent), and research (20 per cent). (*See also* the chapter Rural Industry).

Canning-fruit charge. The present rate of canning-fruit charge is $0.75 per ton of fruit. This rate has operated since 1 December 1964.

Honey levy. The current rate of levy on honey sold for domestic consumption in Australia is four-tenths of a cent per pound.

Livestock slaughter levy. The present operative rate of levy for cattle is 33 cents per head of which 20 cents is for beef research, 1 cent for research into the meat processing industry and 12 cents to finance the operations of the Australian Meat Board. For sheep and lambs the levy is 3.1 cents per head and the components are 1.75 cents for sheep meat research, 0.1 cents for research into the meat processing industry and 1.25 cents for the Australian Meat Board.

Dried Vine Fruits Contributory Charge. Charges in respect of 1965 season fruits were paid into the varietal stabilisation funds at the following rates: currants, $4.12 a ton, and raisins $3.76 a ton.

Poultry industry levy. The rates of levy for each hen kept for commercial purposes (the first twenty hens being exempt) was three pence and one farthing per fortnight from 1 July 1965 to 23 February 1966, 2.8 cents per fortnight from 23 February 1966 to 13 July 1966, 3.5 cents per fortnight from 13 July 1966 to 19 April 1967, 5.0 cents per fortnight from 19 April 1967 to 12 July 1967, 4.0 cents per fortnight from 12 July 1967 to 11 June 1968, 2.0 cents per fortnight from 12 June 1968 to 30 June 1968 and 4.0 cents per fortnight from 1 July 1968.

Commonwealth Consolidated Revenue Fund: expenditure

Details of expenditure from Consolidated Revenue

In the following table gross expenditure from Consolidated Revenue is classified by function and economic type, the classification being consistent with that used for tables on pages 701–3. As with grants to other Commonwealth authorities, transfers to trust funds are here classified as expenditure according to the nature of the respective trust funds. Further information on the expenditure of business undertakings and the Territories, and on other particular functions is included in the chapters Transport and Communication and The Territories of Australia and in the chapters dealing with the respective activities.

COMMONWEALTH CONSOLIDATED REVENUE FUND: EXPENDITURE BY FUNCTION AND ECONOMIC TYPE, 1963-64 TO 1967-68
($'000)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Health and welfare—					
Advances	..	600	..	..	..
Cash benefits to persons	831,327	877,037	926,616	1,016,934	1,059,292
Current expenditure on goods and services	29,034	32,181	35,099	41,635	49,109
Capital expenditure on goods and services	3,081	3,489	3,681	2,738	3,648
Grants to the States	2,218	3,224	5,261	5,525	5,084
Grants for private capital purposes	7,408	8,000	8,666	10,332	9,111
Grants to overseas governments and organisations	..	..	..	785	866
Total, health and welfare	*873,068*	*924,531*	*979,323*	*1,077,948*	*1,127,110*
Defence—					
Current expenditure on goods and services	513,022	587,086	715,579	814,198	940,639
Grants to overseas governments and organisations	4,414	10,210	22,678	34,456	25,618
Other	1,242	814	3,598	2,408	1,653
Total	518,678	598,110	741,855	851,063	967,910
Less Amounts charged to loan fund	77,430	..	89,545	198,426	329,263
Total, defence	*441,248*	*598,110*	*652,310*	*652,637*	*638,647*
Repatriation—					
Cash benefits to persons	181,925	181,036	200,509	192,750	198,171
Current expenditure on goods and services	55,210	58,818	63,659	70,403	75,185
Capital expenditure on goods and services	712	1,124	1,156	889	1,976
Grants towards private capital expenditure	800	2,794	5,714	6,042	5,519
Total, repatriation	*238,647*	*243,772*	*271,038*	*270,084*	*280,851*
Housing—					
Expenses of business undertakings	1,458	1,376	1,299	1,354	1,351
Advances—					
War Service Homes	70,000	70,000	70,000	59,100	46,000
Other	7,770	16,890	12,410	14,306	14,290
Cash benefits to persons	46	130	213	142	44
Current expenditure on goods and services	3,056	3,842	4,172	4,593	4,985
Capital expenditure on goods and services	9,686	12,436	15,257	13,360	18,936
Grants towards private capital expenditure	..	11,350	13,346	11,885	13,299
Total, housing	*92,016*	*116,024*	*116,697*	*104,740*	*98,905*

For footnotes *see* next page.

COMMONWEALTH CONSOLIDATED REVENUE FUND: EXPENDITURE BY FUNCTION AND ECONOMIC TYPE, 1963-64 TO 1967-68—*continued*

($'000)

	1963-64	*1964-65*	*1965-66*	*1966-67*	*1967-68*
Other functions—					
Expenses of business undertakings	286,279	314,254	345,379	384,899	425,570
Other current expenditure on goods and services	274,988	327,082	363,853	421,222	474,290
Capital expenditure on goods and services—					
Business undertakings(*a*)	151,120	177,330	201,745	225,873	266,259
Other	61,885	73,965	81,053	98,566	116,242
Subsidies	115,658	99,808	149,174	171,322	184,378
Cash benefits to persons	14,357	21,526	27,755	36,007	35,117
Grants to the States—					
Current	23,106	31,258	44,478	64,119	78,623
Capital	140,476	178,742	194,102	212,827	249,749
Grants to overseas governments and organisations(*b*)	82,210	96,260	104,754	116,055	131,131
Grants for private capital purposes	..	4,040	19,500	16,308	(*c*)28,929
Advances—					
To Snowy Mountains Hydro-electric Authority	23,658	26,100	26,520	44,096	40,882
To States	10,754	13,788	34,231	27,870	34,514
To overseas governments and organisations	4	78	296	5,815	4,337
Other	15,430	8,272	7,549	2,270	(*d*)25,019
Total advances	49,846	48,238	68,596	80,051	104,752
Total, other functions	*1,199,925*	*1,372,503*	*1,600,389*	*1,827,249*	*2,095,040*
Expenditure not allocated to function—					
Current expenditure on goods and services	11,104	13,912	15,750	15,161	19,660
Capital expenditure on goods and services	11,028	13,462	12,952	20,069	15,687
Grants to the States	729,730	744,884	832,052	900,805	978,503
Advances to overseas governments and organisations	8,070	24,868	45,985	33,193	65,934
Debt charges(*e*)—					
Interest	81,260	81,868	77,392	74,306	85,448
Payment to National Debt Sinking Fund	57,530	61,500	64,849	21,589	25,421
Loan Consolidation and Investment Reserve	29,750	222,744	210,464	227,655	312,762
Redemption—					
International Bank loans	..	..	..	2,286	2,406
Other oversea loans	..	..	..	..	14,106
Treasury bills	36,000	..	..	..	..
Total, not allocated to function	*964,472*	*1,163,238*	*1,259,444*	*1,295,064*	*1,519,927*
Grand total	**3,809,376**	**4,418,178**	**4,879,201**	**5,227,721**	**5,760,480**

(*a*) Includes expenses of undertakings in Northern Territory and Australian Capital Territory. (*b*) Includes grants to Administration of Papua and New Guinea and grants under Colombo Plan, United Nations Technical Assistance Administration, etc. (*c*) Includes $21,000,000 devaluation compensation paid to marketing authorities. (*d*) Includes $19,768,000 for sugar marketing assistance and $3,999,000 for sugar industry assistance. (*e*) Excludes loan management expenses included in other functions.

More detailed information on defence expenditure, on current and capital expenditure on goods and services, and on primary production research and sales promotion, etc. is given in the following tables.

Defence services expenditure

Details of the expenditure on defence services shown in the following table cover expenditure from Consolidated Revenue and Loan Funds by the services and associated departments, including the cost of maintaining forces in overseas posts. In recent years there has been no expenditure on defence services from Trust Funds.

COMMONWEALTH CONSOLIDATED REVENUE FUND EXPENDITURE ON DEFENCE, 1963–64 TO 1967–68

($'000)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Department of Defence—					
Administrative and general expenses	3,532	4,207	6,961	7,346	8,091
Buildings, works, sites, etc.	113	294	197	904	1,507
Maintenance and rent	112	117	202	238	198
Total, Defence	*3,757*	*4,618*	*7,359*	*8,488*	*9,796*
Department of the Navy—					
Naval forces—pay, maintenance, etc.	72,359	83,624	99,046	110,437	121,047
Naval construction and additions to the fleet	23,763	35,967	44,918	51,689	49,201
Ships, aircraft and aircraft engines	9,702	8,622	15,494	8,438	9,183
Buildings, works, sites, etc.	2,413	4,052	7,232	7,927	6,835
Maintenance and rent	2,417	2,631	3,159	3,692	3,705
Retirement benefits	1,024	1,172	1,229	1,392	2,097
Total, Navy	*111,678*	*136,069*	*171,079*	*183,575*	*192,068*
Department of the Army—					
Military forces—pay, maintenance, etc.	91,300	108,920	133,675	169,795	196,425
Special units serving abroad—maintenance	4,026	4,566	9,773	26,386	34,048
Arms, armament and equipment	48,432	61,690	67,921	69,913	79,711
Buildings, works, sites, etc.	6,551	13,856	38,693	58,088	40,011
Maintenance and rent	5,444	6,372	7,503	8,447	9,829
Retirement benefits	2,668	3,368	3,657	3,827	4,758
Total, Army	*158,421*	*198,772*	*261,223*	*336,456*	*364,782*
Department of Air—					
Air force—pay, maintenance, etc.	59,221	69,389	77,674	86,311	97,027
R.A.A.F. squadrons overseas	5,570	5,592	7,080	9,447	13,973
Aircraft, equipment and stores	101,418	91,034	111,712	111,117	158,522
Buildings, works, sites, etc.	5,616	7,598	13,336	11,719	16,915
Maintenance and rent	5,324	5,570	6,024	7,096	7,913
Retirement benefits	1,996	2,996	2,582	2,808	3,165
Total, Air	*179,145*	*182,179*	*218,408*	*228,498*	*297,515*
Department of Supply—					
Administrative and general expenses	3,746	8,912	9,566	14,107	19,953
Defence Research and Development Laboratories	9,292	10,608	10,401	10,627	11,852
Government factories—maintenance of production capacity	3,090	2,766	2,270	3,139	3,227
Transport and storage services	4,508	6,764	7,027	7,661	10,088
Weapons Research Establishment	29,012	28,320	27,725	28,030	28,851
Munitions factories—working capital	164	..	2,004	475	869
Machinery, plant equipment, etc.	4,650	4,850	7,067	7,601	8,155
Buildings, works, sites, n.e.i. etc.	2,185	2,486	3,011	3,853	3,341
Maintenance and rent	1,939	2,038	2,293	2,465	2,507
Total, Supply	*58,586*	*66,744*	*71,364*	*77,958*	*88,843*
Defence aid for Malaysia	144	3,376	5,034	8,036	6,096
Economic assistance to support defence programme of S.E.A.T.O. member countries	1,888	2,504	2,258	2,309	2,498
Security Intelligence Organization	1,716	1,920	1,990	2,565	2,753
Civil defence	642	644	724	709	734
Recruiting campaign	1,378	1,690	1,646	1,556	1,600
Aid to India	1,284	60	17	..	..
Other	39	—466	751	912	1,225
Total, Defence services	*518,678*	*598,110*	*741,855*	*851,063*	*967,910*
Less Expenditure charged to Loan Fund	77,430	..	89,545	198,426	329,263
Total expenditure charged to Consolidated Revenue Fund	**441,248**	**598,110**	**652,310**	**652,637**	**638,647**

Minus sign (—) denotes the result of differences in timing between payment for, and deliveries of, defence equipment.

Current expenditure on goods and services

This table gives details of expenditure on items included under this general heading in the table on pages 724–5, and in the main includes expenditure on administrative services and other activities (i.e. what might be termed 'running expenses') and therefore *excludes* expenditure on capital works (*see* table on page 729). Information on the functions of departments and the Acts administered by the Ministers of Departments may be found on pages 87–98 of Year Book No. 49.

COMMONWEALTH CONSOLIDATED REVENUE FUND: CURRENT EXPENDITURE ON GOODS AND SERVICES, 1963-64 TO 1967-68

($'000)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Education—					
Australian National University	8,640	11,400	12,658	14,223	16,698
Other	6,074	7,655	8,674	9,590	11,863
Total, education	*14,714*	*19,055*	*21,332*	*23,813*	*28,561*
Health and welfare	29,034	32,181	35,099	41,635	49,109
Defence—					
Total	513,022	587,086	715,579	814,198	940,639
Less Amounts charged to Loan Fund	77,430	..	89,545	198,426	329,263
Total, defence	*435,592*	*587,086*	*626,034*	*615,772*	*611,376*
Repatriation	55,210	58,818	63,659	70,403	75,185
Housing	3,056	3,842	4,172	4,593	4,985
Law, order and public safety—					
Crown Solicitor's Office	1,144	1,216	1,322	1,512	1,662
High Court	340	370	398	431	443
Bankruptcy administration	576	624	662	828	968
Other	4,419	5,092	5,884	8,416	9,949
Total, law, order, etc.	*6,479*	*7,302*	*8,266*	*11,187*	*13,022*
Development of resources and assistance to industry—					
Bureau of Meteorology	4,394	4,870	5,318	5,932	6,478
Forestry Branch	374	607	735	1,081	1,307
Commercial intelligence services abroad	2,485	2,996	3,313	3,727	4,451
Primary production—					
Wheat and wool industries	9,122	22,150	26,416	27,090	23,581
Other research and sales promotion, export funds, etc.	5,230	6,532	9,632	8,229	9,282
Bureau of Agricultural Economics	444	472	523	630	1,053
Bureau of Mineral Resources, Geology and Geophysics	4,930	4,708	4,775	4,725	5,866
Division of National Mapping	1,414	1,706	1,786	2,111	2,789
Atomic Energy Commission	7,594	8,040	8,226	8,593	9,488
Commonwealth Scientific and Industrial Research Organization	21,121	24,097	25,393	28,551	31,346
Other	17,024	17,402	19,617	23,199	30,588
Total, development, etc.	*74,132*	*93,580*	*105,734*	*113,868*	*126,229*
Civil aviation—					
Maintenance and development of civil aviation	9,353	10,221	11,432	10,837	11,160
Meteorological services	2,140	2,392	2,600	2,898	3,198
Other	15,156	17,346	19,421	24,588	29,201
Total, civil aviation, etc.	*26,649*	*29,959*	*33,453*	*38,323*	*43,559*

COMMONWEALTH CONSOLIDATED REVENUE FUND: CURRENT EXPENDITURE ON GOODS AND SERVICES, 1963–64 TO 1967–68—*continued*

($'000)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Legislature and general administration—					
Parliament	4,414	4,894	5,494	5,712	6,276
Governor-General	358	392	375	422	423
Audit	1,950	2,024	2,081	2,514	2,698
Public Service Board	2,134	2,420	2,738	3,407	3,923
Taxation Branch and Boards of Review	24,177	26,038	28,556	34,094	36,983
Bureau of Census and Statistics	6,276	7,346	8,783	14,063	12,718
Commonwealth Superannuation Board	422	498	752	931	1,146
Electoral Branch	2,530	2,772	2,164	4,749	3,759
News and Information Bureau	1,396	1,660	1,903	2,327	2,602
Other	51,663	58,326	65,857	80,866	94,505
Total, legislature, etc.	*95,320*	*106,370*	*118,703*	*149,085*	*165,033*
Immigration—					
Assisted migration	17,745	25,458	26,186	25,875	27,284
Other	7,901	8,566	9,409	11,881	13,617
Total, immigration	*25,646*	*34,024*	*35,595*	*37,756*	*40,901*
Regulation of trade and industry—					
Conciliation and Arbitration Commission, Industrial Court and Registrar	816	884	996	1,080	1,204
Patents, trade marks and designs	1,330	1,478	1,515	1,663	1,962
Inspection of goods for export	3,670	4,498	4,910	5,545	6,156
Other	3,466	3,380	3,134	1,966	5,254
Total, regulation, etc.	*9,282*	*10,240*	*10,555*	*10,254*	*14,576*
Other functions—					
National Library	1,374	1,622	1,941	2,356	3,024
High Commissioner's Office, United Kingdom	2,562	2,982	3,748	4,309	4,320
Other overseas representation	6,752	7,744	9,670	10,556	13,629
Antarctic Division	1,668	1,902	1,985	1,746	1,904
Other	10,410	12,302	12,871	17,969	19,532
Total, other functions	*22,766*	*26,552*	*30,215*	*36,936*	*42,409*
Not allocated to function—					
Superannuation contributions, n.e.i.	8,706	10,592	12,019	11,626	16,004
Other	2,398	3,320	3,731	3,535	3,656
Total, not allocated	*11,104*	*13,912*	*15,750*	*15,161*	*19,660*
Grand total	**808,984**	**1,022,921**	**1,108,567**	**1,168,786**	**1,234,605**

Capital expenditure on goods and services

In the following table details are given of capital expenditure on goods and services during each of the years 1963–64 to 1967–68. The table covers capital expenditure on goods and services from the Consolidated Revenue Fund for purposes other than defence and repatriation services.

COMMONWEALTH CONSOLIDATED REVENUE FUND: CAPITAL EXPENDITURE ON GOODS AND SERVICES, 1963-64 TO 1967-68

($'000)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Business undertakings—					
Cultural and recreational facilities	6,548	9,246	7,567	5,558	7,652
Transport and communication—					
Post Office	136,836	159,796	181,738	205,769	242,359
Railways	5,878	6,514	9,724	10,855	13,667
Other	708	960	1,916	3,251	1,381
Housing(*a*)	8,814	11,620	14,194	11,662	17,661
Other	1,150	914	800	440	1,200
Total, business undertakings	*159,934*	*189,050*	*215,939*	*237,535*	*283,920*
Other—					
Education—					
Australian National University	4,678	5,392	5,062	5,316	5,570
Canberra College of Advanced Education	..	..	..	25	439
Northern Territory	864	1,377	1,503	1,243	992
Australian Capital Territory	3,712	3,956	3,284	4,652	4,770
Other	..	..	..	85	161
Total, education	*9,254*	*10,725*	*9,849*	*11,321*	*11,932*
Health and welfare—					
Australian Capital Territory	2,148	2,584	1,866	1,142	192
Other health and welfare	933	905	1,815	1,596	3,456
Total, health and welfare	*3,081*	*3,489*	*3,681*	*2,738*	*3,648*
Repatriation	712	1,124	1,156	889	1,976
Development of resources and assistance to industry—					
Atomic Energy Commission	1,064	1,390	1,292	1,629	1,351
Commonwealth Scientific and Industrial Research Organisation	3,610	6,396	3,380	3,726	4,873
Australian Capital Territory	920	2,822	3,395	13,775	10,393
Other development, etc.	1,684	1,580	2,181	2,222	4,237
Total, development	*7,278*	*12,188*	*10,248*	*21,352*	*20,854*
Civil aviation	11,774	17,628	21,941	28,781	31,139
Roads—					
Australian Capital Territory	5,388	6,450	10,156	8,569	11,342
Other roads	3,664	2,912	4,319	4,563	9,359
Total, roads	*9,052*	*9,362*	*14,475*	*13,132*	*20,701*
Housing(*b*)	872	816	1,063	1,698	1,275
Other functions—					
Australian Capital Territory	12,936	11,178	11,321	10,842	14,503
Papua and New Guinea	48	4	125	20	62
Other	11,543	12,780	13,094	13,118	17,051
Total, other functions	*24,527*	*23,962*	*24,540*	*23,980*	*31,616*
Not allocated to function	11,028	13,462	12,952	20,069	15,687
Grand total	**237,512**	**281,806**	**315,844**	**361,495**	**422,748**

(*a*) *See also* separate item Housing. (*b*) *See also* under Business undertakings.

Expenditure on primary production—research and sales promotion, export funds, etc.

Expenditure under this item is classified in the table on page 727 to development of resources and assistance to industry as it includes the proceeds of special industry taxes and profits from marketing schemes which are paid to trust funds or other authorities for the purposes of the industries concerned. Information relating to the taxes levied is given in the table on page 720. Some details of expenditure from the trust funds are included in the table on page 731. Details of expenditure from the Consolidated Revenue Fund during the last five years are given in the following table.

COMMONWEALTH CONSOLIDATED REVENUE FUND: EXPENDITURE ON PRIMARY PRODUCTION—RESEARCH AND SALES PROMOTION, EXPORT FUNDS, ETC., 1963-64 TO 1967-68

($'000)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Research and sales promotion—					
Canned fruit (sales promotion)	101	64	130	128	100
Meat research	1,433	1,613	1,930	2,368	2,547
Dairy produce research	590	510	712	712	806
Dairy produce sales promotion	523	526	779	805	834
Tobacco industry research	401	364	322	319	349
Wheat research	638	720	590	1,082	633
Wool industry research	1,594	3,181	2,824	3,045	598
Wool research and wool use promotion	6,890	18,249	23,002	22,964	22,350
Export funds—					
Apple and pear	245	213	312	199	219
Canned fruits	185	170	216	223	348
Canned fruits excise	279	1,044	1,033	1,200	1,583
Dairy produce	530	675	776	876	760
Dried fruits	102	165	188	147	167
Dried vine fruits stabilisation fund—					
Currants	..	..	72	52	..
Raisins	..	..	165	..	42
Sultanas	..	..	1,530	..	139
Egg	57	78	25	4	5
Honey	74	94	110	92	98
Meat	484	741	1,042	864	926
Wine	225	274	288	239	357
Other	1	2	1	1	1
Total	**14,351**	**28,682**	**36,048**	**35,319**	**32,864**

Commonwealth Consolidated Revenue Fund: receipts

Sources of receipts

COMMONWEALTH CONSOLIDATED REVENUE FUND: SOURCES OF RECEIPTS 1963-64 TO 1967-68

($'000)

Source	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Taxation	3,218,838	3,787,030	4,185,338	4,453,815	4,914,165
Business undertakings	375,777	423,948	457,738	490,160	550,376
Territories—					
Northern Territory	4,944	5,611	6,434	7,273	9,663
Australian Capital Territory	14,086	18,193	18,571	16,600	18,884
Christmas Island	..	..	..	245	51
Cocos (Keeling) Islands	8	8	9	11	9
Total, Territories	*19,038*	*23,813*	*25,013*	*24,128*	*28,607*
Interest	46,852	48,394	51,440	59,128	61,097
Dividends or payments in the nature of a dividend	5,076	5,118	5,197	6,156	3,501
Repayments	11,532	8,897	9,680	44,438	46,246
Defence	44,651	28,961	28,906	26,336	26,267
Air navigation charges	3,755	4,437	6,888	8,184	9,860
Quarantine and other health services	372	344	463	389	435
Patents, trade marks, etc.	1,281	1,315	1,447	1,539	1,587
Bankruptcy	405	430	438	450	486
Net profit on Australian note issue	26,983	30,521	31,070	33,852	16,575
Unrequired balances of trust accounts	25,182	8,472	6,980	8,322	22,674
Australian Aluminium Production Commission	500	500	1,250	1,250	1,250
Reserve Bank Reserve Fund	3,351	4,983	10,500	4,712	4,442
Commonwealth Banking Corporation	2,290	3,477	3,232	3,649	3,245
Other	23,493	37,538	53,622	61,212	69,667
Grand total	**3,809,376**	**4,418,178**	**4,879,201**	**5,227,721**	**5,760,480**

Further information on receipts of business undertakings and the Territories is included respectively in the Chapters 12, Transport and Communication and 29, The Territories of Australia.

Commonwealth trust funds

The next table shows the opening and closing balances and receipts and expenditure of some of the more important trust funds of the Commonwealth for the year 1967–68, and the following table shows the totals for the last five years.

COMMONWEALTH TRUST FUNDS: RECEIPTS, EXPENDITURE AND BALANCES, 1967-68
($'000)

Fund	*Balance at 1 July 1967*	*1967–68*		*Balance at 30 June 1968*
		Receipts	*Expenditure*	
Canadian Loan	15,516	563	544	15,535
Coal Mining Industry Long Service Leave .	2,948	806	918	2,836
Coinage	7,870	50,202	50,660	7,412
Defence Forces Retirement Benefits . .	82,290	25,391	14,352	93,330
Insurance Deposits	25,392	4,374	2,723	27,043
Imperial Pensions	1,064	17,020	17,198	886
International Development and Relief . .	545	784	747	582
Lend-Lease Settlement	314	12	326	..
Loan Consolidation and Investment Reserve .	915,345	347,602	173,560	1,089,387
Munitions Factories	4,124	52,481	52,108	4,497
Munitions Production	3,010	25,411	26,911	1,511
National Debt Sinking	197,283	141,016	195,272	143,027
National Welfare	431,106	1,079,376	1,075,049	435,433
Parliamentary Retiring Allowances . .	1,483	494	354	1,622
Post Office Stores and Services . . .	53	221,264	221,306	11
Poultry Industry	..	10,946	10,418	529
Superannuation	287,984	78,329	40,499	325,814
Supply, Stores and Transport . . .	830	17,014	16,536	1,307
Swiss Loan	36,978	1,116	..	38,093
Temple Society	1,452	60	97	1,415
Tobacco Industry	529	713	688	554
War Service Homes	..	49,293	49,293	..
War Service Homes Insurance . . .	1,576	784	1,096	1,264
Wheat Prices Stabilisation	..	15,508	15,508	..
Wheat Research	1,628	1,555	1,844	1,339
Wine Research	824	37	37	824
Wool Research	3,690	9,641	8,176	5,154
Other	21,540	132,323	126,898	26,967
Total	**2,045,374**	**2,284,115**	**2,103,118**	**2,226,372**

COMMONWEALTH TRUST FUNDS: SUMMARY, 1963-64 TO 1967-68
($ million)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Balances brought forward . .	1,613	1,661	1,863	2,023	2,045
Receipts	1,546	1,827	1,999	2,068	2,284
Expenditure	1,498	1,625	1,839	2,046	2,103
Balance carried forward . . .	1,661	1,863	2,023	2,045	2,226

Commonwealth Loan Fund

Brief historical notes relating to the Commonwealth Loan Fund are given in earlier issues of the Year Book (*see* No. 37, page 640). The following tables show details for the years 1963–64 to 1967 -68 of receipts by, and expenditure from, Commonwealth Loan Fund in respect of loans raised for both Commonwealth and State Governments. Information relating to the Commonwealth Government securities on issue is given in the division Government Securities on Issue, Commonwealth and States, of this chapter.

Loans raised for the Commonwealth

COMMONWEALTH LOAN FUND: LOANS RAISED FOR THE COMMONWEALTH RECEIPTS AND EXPENDITURE, 1963-64 TO 1967-68

($'000)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
RECEIPTS					
Balance from 30 June	97	125	205	139	51
Loans raised in Australia—					
Stock and bonds	143,919	87,905	111,308	134,937	46,751
Special bonds	26,352	34,342	32,304	39,580	33,922
Advance loan subscriptions	*Dr* 21,560	3,305	*Dr* 213	9,297	1,018
Treasury bills—public (net)	*Dr* 2,400	38,000	5,500	149,000	140,000
Treasury bills—internal (investment of Trust Fund) (net)	39,400	33,400	49,100	*Dr* 2,000	5,500
Treasury notes	13,590	*Dr* 72,138	35,664	*Dr* 25,933	183,572
Peace savings certificates	2	2	..	1	1
Loans raised overseas—					
London—stock and bonds	20,636	..	..	..	32,063
New York—bonds	..	4,421	4,474	43,593	22,523
Loan—Qantas Empire Airways Limited	4,033	26,292	25,214	16,368	34,681
Loan—Australian National Airlines Commission	1,121	8,566	5,075	14,367	4,538
International Bank Dollar loan	24,232	21,151	15,299	499	..
Swiss loan	..	..	..	10,352	..
West German Loan	..	..	..	..	22,209
Total, loans raised	*249,325*	*185,247*	*283,725*	*390,060*	*526,778*
Deduct—					
Expenses of flotation—					
Loans raised in Australia	*Cr* 631	306	372	462	239
London loans	317	..	..	..	..
New York loans	..	147	87	1,152	1,506
Swiss loans	..	..	..	523	..
Total, deductions	*Cr 314*	*452*	*460*	*2,138*	*1,745*
Total loan raisings less *expenses of flotation*	*249,638*	*184,795*	*283,265*	*387,922*	*525,033*
Grand total	**249,736**	**184,920**	**283,471**	**388,061**	**525,084**
EXPENDITURE					
Financial assistance to States for housing—					
New South Wales	33,000	35,000	40,271	41,500	43,080
Victoria	26,500	27,000	31,126	32,020	33,000
Queensland	8,600	6,600	8,497	9,060	9,060
South Australia	19,400	20,500	21,057	20,750	21,000
Western Australia	6,800	7,200	8,601	9,170	10,000
Tasmania	6,000	6,400	7,448	7,500	6,700
Total, States, housing	*100,300*	*102,700*	*117,000*	*120,000*	*122,840*
Defence services	77,431	..	89,545	198,426	329,263
War and repatriation services	8,525	7,234	6,358	5,936	5,212
Loan—Qantas	4,033	26,292	25,214	16,368	34,681
Loan—Australian National Airlines Commission	1,121	8,566	5,075	14,367	4,538
Mount Isa Railway Agreement	12,100	3,016	..	..	578
Snowy Mountains Hydro-electric Authority	23,402	19,600	16,000	4,450	..
Works and other purposes—repayments	*Cr* 566	*Cr* 93	..	..	..
Other	..	..	330	195	197
Redemptions—					
Stock and bonds—Australia	9,085	..	..	..	2,649
Stock and bonds—London	14,180	..	..	..	..
Special bonds	..	17,400	23,810	28,268	25,042
Balance at 30 June	125	205	139	51	84
Grand total	**249,736**	**184,920**	**283,471**	**388,061**	**525,084**

Loans raised for the States

COMMONWEALTH LOAN FUND: LOANS RAISED FOR THE STATES RECEIPTS AND EXPENDITURE, 1963-64 TO 1967-68

($'000)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
			RECEIPTS		
Balance from 30 June	. .	. .	. .	. .	. .
Loans raised in Australia—					
Stock and bonds	363,889	457,159	523,795	583,236	669,802
Special bonds	65,207	53,124	48,121	44,673	44,768
Loans raised overseas—					
London—stock and bonds	28,762	. .	. .	. .	. .
New York—bonds	. .	17,686	17 895	. .	. .
Total	**457,857**	**527,969**	**589,812**	**627,909**	**714,570**
			EXPENDITURE		
Payments of loan proceeds to the States—					
New South Wales	140,020	149,470	152,150	163,640	172,240
Victoria	111,728	120,954	123,206	132,520	139,700
Queensland	42,412	48,000	63,692	55,915	60,547
South Australia	55,184	59,020	61,892	67,680	71,820
Western Australia	44,006	46,968	47,902	51,070	53,230
Tasmania	30,318	32,244	33,228	34,517	38,916
Total payments to States	*423,668*	*456,656*	*482,070*	*505,342*	*536,453*
Redemptions—					
Stock and bonds—Australia	24,384	30,000	56,000	30,000	117,351
Special bonds	9,806	16,238	31,683	27,468	28,058
London	. .	25,075	20,060	37,613	32,000
New York	. .	. .	. .	26,806	. .
Other	. .	. .	. .	680	709
Balance at 30 June	. .	. .	. .	. .	. .
Grand total	**457,857**	**527,969**	**589,812**	**627,909**	**714,570**

STATE FINANCE

Functions of State Governments

In comparing the financial results of the States allowances must be made for the various functions discharged by the respective State Governments and for local conditions in each case. Direct comparisons of the revenue, expenditure and debt of the individual States are difficult owing to the fact that functions which in one State are assumed by the central government are in another delegated to local government or semi-governmental bodies which are vested with certain defined borrowing powers and whose financial transactions are not included with those of the central government. Care is needed, therefore, in making comparisons, and the particulars contained in this chapter should be read with those contained in the chapter Local Government.

Accounts of State Governments

The various financial transactions of the States are in each case concerned mainly with one or other of three funds—the Consolidated Revenue Fund, the Trust Fund and the Loan Fund.

All revenue (except certain items paid into special funds) collected by a State is paid into its *Consolidated Revenue Fund*, from which payments are made under authority of an annual Appropriation Act passed by the legislature, or by a permanent appropriation under a special Act. Figures relating to New South Wales represent the transactions of the Consolidated Revenue Fund and the business undertakings included in the annual budget papers. These undertakings are: railways, tramways and omnibuses, and Sydney Harbour Trust Section of the Maritime Services Board. Adjustments have been made to the Budget figures, however, in order to eliminate duplications caused by inter-fund payments. Particulars for all other States relate to the transactions of the Consolidated Revenue Fund.

The *Trust Fund* comprises all moneys held in trust by the Government and includes such items as superannuation funds, road funds, insurance companies' deposits, etc.

The *Loan Fund* is debited with all loan moneys raised for the State and credited with the expenditure therefrom on public works or other purposes.

Inter-relation of Commonwealth and State finances

A statement in some detail, covering the inter-relation of Commonwealth and State finances during the period from the inception of federation to the passing of the *Financial Agreement Act* 1928, was published in Year Book No. 22, pages 379–80. Changes in the financial relations between the Commonwealth and States since the passing of the Financial Agreement Act have been described in issues of the Year Book from year to year.

State Consolidated Revenue Fund: expenditure

The principal heads of State expenditure from Consolidated Revenue Funds are: (*a*) interest, exchange and debt redemption charges in connection with debt; (*b*) working expenses of business undertakings; (*c*) education; (*d*) health and charitable expenditure; (*e*) justice; (*f*) police; (*g*) penal establishments; and (*h*) all other expenditure, including expenditure on public works, lands and surveys, agriculture and forestry, legislative and general administration, pensions, and miscellaneous.

In 1967–68 education constituted 25.2 per cent of the total expenditure from the State Consolidated Revenue Funds; the working expenses of railways, tramways, and omnibuses, 19.8 per cent: debt charges, 17.2 per cent; charitable, public health and hospitals, 13.4 per cent; and law, order and public safety, 6.2 per cent.

Total expenditure

The total expenditure from the Consolidated Revenue Funds of the several States and the expenditure per head of population during each of the years 1963–64 to 1967–68 are shown in the following table.

STATE CONSOLIDATED REVENUE FUND EXPENDITURE, 1963-64 TO 1967-68

Year	*N.S.W.(a)*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
			EXPENDITURE ($'000)				
1963–64 . .	683,992	444,874	260,454	199,755	170,681	69,577	1,829,333
1964–65 . .	734,160	480,668	271,215	216,803	184,840	77,447	1,965,133
1965–66 . .	776,314	516,689	298,022	235,650	206,665	86,917	2,120,259
1966–67 . .	833,832	559,595	323,523	250,717	228,174	94,414	2,290,254
1967–68 . .	887,618	604,122	356,249	267,404	249,909	103,302	2,468,603
			PER HEAD OF POPULATION ($)				
1963–64 . .	167.69	144.75	163.29	195.18	213.67	191.80	167.33
1964–65 . .	177.22	153.26	166.70	206.07	226.20	211.39	176.38
1965–66 . .	184.41	161.77	179.52	217.82	246.83	235.17	186.76
1966–67 . .	195.15	172.19	191.65	227.10	264.66	252.50	198.28
1967–68 . .	204.18	182.93	207.38	239.13	280.00	272.30	209.96

(*a*) *See* above for transactions included.

Details of expenditure

The following tables show the total expenditure and expenditure per head of population for each of the principal items. For further information on the finances of the various types of business undertakings in the States *see* the chapters Transport, Communication and Travel, and Local Government of this Year Book.

STATE CONSOLIDATED REVENUE FUND EXPENDITURE: DETAILS, 1967-68

	N.S.W. (*a*)	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.* (*b*)	*Total*
				EXPENDITURE ($'000)			
Debt (interest, exchange, debt redemption, etc.)	115,550	110,774	58,967	65,062	44,185	30,571	425,108
Railways	182,048	98,472	90,884	31,322	52,475	3,153	458,353
Tramways and omnibuses	29,785	..	..	..	557	875	31,217
Harbours and rivers, etc.	15,442	1,686	..	3,585	2,885	30	23,629
Water supply, sewerage, irrigation and drainage	..	10,572	..	14,152	7,542	700	32,967
Other business and industrial undertakings	..	877	58	873	4,070	86	5,965
Education	229,888	179,423	74,372	62,765	50,604	23,935	620,987
Health and charitable	112,618	83,143	50,997	34,459	35,619	14,112	330,947
Justice	15,980	5,538	4,896	2,116	2,660	1,087	32,277
Police	35,219	25,024	15,080	8,672	6,866	3,588	94,448
Penal establishments	8,609	3,643	2,000	2,177	2,572	924	19,924
Public safety	2,238	122	1,583	399	495	305	5,143
All other expenditure	140,240	84,848	57,412	41,822	39,380	23,936	387,639
Total	**887,618**	**604,122**	**356,249**	**267,404**	**249,909**	**103,302**	**2,468,603**
				PER HEAD OF POPULATION ($)			
Debt (interest, exchange, debt redemption, etc.)	26.58	33.54	34.33	58.18	49.50	80.58	36.16
Railways	41.88	29.82	52.91	28.01	58.79	8.31	38.98
Tramways and omnibuses	6.85	..	..	..	0.62	2.31	2.66
Harbours and rivers, etc.	3.55	0.51	..	3.21	3.23	0.08	2.01
Water supply, sewerage, irrigation and drainage	..	3.20	..	12.66	8.45	1.85	2.80
Other business and industrial undertakings	..	0.27	0.03	0.78	4.56	0.23	0.51
Education	52.88	54.33	43.29	56.13	56.70	63.09	52.82
Health and charitable	25.91	25.18	29.69	30.82	39.91	37.20	28.15
Justice	3.68	1.68	2.85	1.89	2.98	2.87	2.75
Police	8.10	7.58	8.78	7.76	7.69	9.46	8.03
Penal establishments	1.98	1.10	1.16	1.95	2.88	2.44	1.69
Public safety	0.51	0.04	0.92	0.36	0.55	0.80	0.44
All other expenditure	32.26	25.69	33.42	37.40	44.12	63.09	32.97
Total	**204.18**	**182.93**	**207.38**	**239.13**	**280.00**	**272.30**	**209.96**

(*a*) *See* page 734 for transactions included. (*b*) Tasmanian transport services are under the separate control of semi-governmental authorities. Figures shown for relevant items represent payments to the authorities.

TOTAL STATE CONSOLIDATED REVENUE FUND EXPENDITURE: DETAILS 1963-64 TO 1967-68

($'000)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Debt (interest, exchange, debt redemption, etc.)	320,403	343,990	370,551	397,077	425,108
Railways, tramways and omnibuses (working expenses)	420,585	443,947	451,226	467,200	489,570
Harbours and rivers, etc.	19,035	20,652	19,445	20,580	23,629
Water supply, sewerage, irrigation and drainage	26,313	24,840	27,301	29,269	32,967
Other business and industrial undertakings	5,187	6,260	5,235	5,183	5,965
Education	401,009	457,333	499,733	552,836	620,987
Health and charitable	239,167	260,508	285,587	309,569	330,947
Justice	21,749	24,187	26,286	29,029	32,277
Police	68,008	72,981	77,102	87,616	94,448
Penal establishments	13,054	14,204	15,258	17,436	19,924
Public safety	3,935	4,038	4,400	4,644	5,143
All other expenditure	290,887	292,194	338,135	369,814	387,639
Total	**1,829,333**	**1,965,133**	**2,120,259**	**2,290,254**	**2,468,603**

State Consolidated Revenue Fund: receipts

The principal sources of State revenue are: (*a*) taxation; (*b*) the business undertakings controlled by the State Governments; (*c*) sale of and rental from crown lands; (*d*) interest on advances; (*e*) payments by the Commonwealth Government under the Financial Agreements, Special Grants and Financial Assistance Acts, etc.; (*f*) Commonwealth National Welfare Fund payments; and (*g*) miscellaneous sources, comprising fines, fees, etc.

Of these sources, that yielding the largest revenue to the Consolidated Revenue Funds for the States as a whole in the year 1967–68 was Commonwealth payments under financial assistance and other grants (40.5 per cent of the total revenue). Next in magnitude was the group of business undertakings (25.0 per cent), the principal contributors being the Government railways and tramways, followed by taxation receipts (19.5 per cent). More than one-quarter of the total State taxation collections are not paid into Consolidated Revenue Funds, however, but into trust and other funds (*see* page 740). Of the remaining sources of revenue, interest (n.e.i.) constituted 4.2 per cent, land revenue 2.5 per cent, and National Welfare Fund payments 1.0 per cent.

Total receipts

The following table shows particulars of the total receipts and the receipts per head of population of the Consolidated Revenue Funds of the several States.

STATE CONSOLIDATED REVENUE FUNDS

1967-68

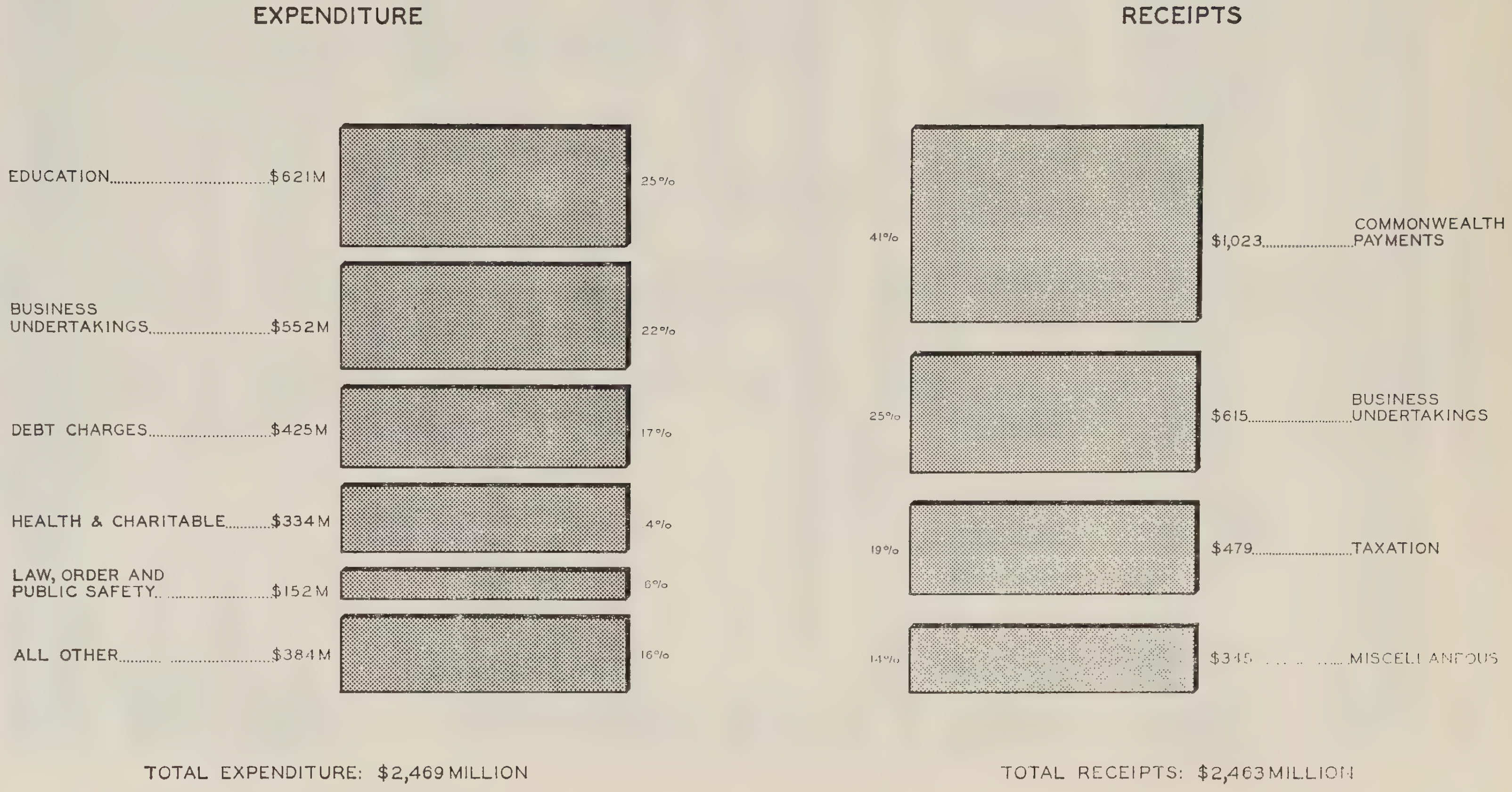


PLATE 39

STATE CONSOLIDATED REVENUE FUND RECEIPTS, 1963-64 TO 1967-68

Year	*N.S.W.(a)*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
RECEIPTS ($'000)							
1963–64	684,535	444,368	260,897	203,006	167,888	68,391	1,829,087
1964–65	729,091	480,668	267,139	214,181	180,143	75,828	1,947,050
1965–66	771,627	508,554	294,502	228,816	206,655	84,896	2,095,051
1966–67	830,685	559,595	323,781	250,823	228,146	93,842	2,286,873
1967–68	888,077	601,328	357,219	264,544	250,738	101,452	2,463,357
PER HEAD OF POPULATION ($)							
1963–64	167.82	144.59	163.57	198.35	210.17	188.53	167.31
1964–65	176.00	153.26	164.20	203.58	220.45	206.97	174.76
1965–66	183.30	159.22	177.40	211.50	246.81	229.70	184.54
1966–67	194.42	172.19	191.80	227.20	264.63	250.97	197.98
1967–68	204.29	182.09	207.95	236.57	280.93	267.42	209.51

(a) *See* page 734 for transactions included.

Sources of revenue

Classifying the revenue of the several States in the manner indicated on page 736, particulars for the year 1967–68 were as follows.

STATE CONSOLIDATED REVENUE FUND RECEIPTS, BY SOURCE, 1967-68

Source of revenue	*N.S.W. (a)*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas. (b)*	*Total*
RECEIPTS ($'000)							
Taxation(*c*)	173,691	149,614	60,924	44,830	35,824	14,468	479,351
Business undertakings	272,570	129,827	91,647	60,256	60,883	248	615,431
Lands	22,917	9,144	13,281	2,074	11,845	1,972	61,233
Interest, n.e.i.	9,490	24,137	17,983	20,906	13,176	16,829	102,523
Commonwealth grants(*d*)—							
Financial assistance	302,827	228,254	139,601	102,738	96,152	37,968	907,539
Other(*e*)	20,045	12,010	12,946	8,397	16,502	20,560	90,461
Commonwealth National Welfare Fund payments(*f*)	14,709	4,237	1,591	3,345	154	1,196	25,232
Miscellaneous	71,829	44,105	19,245	21,997	16,202	8,210	181,587
Total	**888,077**	**601,328**	**357,219**	**264,544**	**250,738**	**101,452**	**2,463,357**
PER HEAD OF POPULATION ($)							
Taxation(*c*)	39.95	45.30	35.47	40.09	40.14	38.14	40.77
Business undertakings	62.70	39.31	53.35	53.89	68.21	0.65	52.34
Lands	5.27	2.77	7.73	1.85	13.27	5.20	5.21
Interest, n.e.i.	2.18	7.31	10.47	18.70	14.76	44.36	8.72
Commonwealth grants(*d*)—							
Financial assistance	69.66	69.12	81.27	91.88	107.73	100.08	77.19
Other(*e*)	4.61	3.64	7.54	7.51	18.49	54.20	7.69
Commonwealth National Welfare Fund payments(*f*)	3.38	1.28	0.93	2.99	0.17	3.15	2.15
Miscellaneous	16.52	13.36	11.20	19.67	18.15	21.64	15.44
Total	**204.29**	**182.09**	**207.95**	**236.57**	**280.93**	**267.42**	**209.51**

(a) *See* page 734. (b) Tasmanian transport services are under the separate control of semi-governmental authorities. (c) In all States certain taxation collections are not paid into Consolidated Revenue Fund. For total collections *see* next page. (d) Excludes Commonwealth payments paid to trust funds. (e) Includes payments under Financial Agreement, special grants, additional financial assistance, grants to universities, etc. (f) Consolidated Revenue Fund receipts only. Excludes payments to Trust Funds.

State receipts from taxation

In the tables on taxation collections in these paragraphs the collections have been grouped according to the nature of the tax rather than the method of collection. For example, stamp duties on betting tickets and bookmakers' licences have been included under Racing instead of under Stamp duties and Licences respectively.

Net taxation collections

The following tables show, for the year 1967–68, details of the collections by each State from the various types of tax in operation, irrespective of whether such moneys have been paid into the Consolidated Revenue Funds or not. For this reason the particulars hereunder differ from those shown in the tables relating to the Consolidated Revenue Funds and present a comprehensive statement of all taxation collections in each State. For local government taxation collections, *see* chapter 20.

STATE GOVERNMENT RECEIPTS FROM TAXATION: NET COLLECTIONS BY TYPE OF TAX 1967–68
($'000)

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
Probate and succession duties	48,206	37,642	16,987	8,153	5,162	2,525	118,675
Land tax	35,711	20,976	4,742	7,701	4,702	2,271	76,103
Liquor taxes	14,067	9,744	4,736	2,236	2,566	950	34,299
Lottery taxes	..	6,085	787	..	..	..	6,872
Poker machines tax	23,063	..	..	..	..	..	23,063
Racing taxes	16,580	16,024	5,563	2,019	3,318	192	43,696
Vehicle registration fees and taxes	41,330	39,838	20,831	11,825	6,277	4,074	124,175
Drivers', etc. licences and fees	7,668	3,010	1,366	1,021	1,344	..	14,409
Stamp duty (vehicle registration)	3,016	5,436	2,722	1,850	1,555	189	14,768
Road transport taxes	4,438	1,770	6,309	31	689	321	13,558
Road maintenance contributions	12,566	7,248	3,918	2,324	2,873	..	28,929
Third party insurance surcharges and duties	..	2,497	..	..	700	275	3,472
Fire Brigades contributions	629	..	3,606	..	..	..	4,235
Stamp duties n.e.i.	56,775	52,909	18,104	10,385	16,754	3,563	158,490
Licences and registration fees n.e.i.	1,343	1,683	331	256	482	35	4,130
Other taxes	353	8,398	3,618	..	1,922	72	14,363
Total	**265,743**	**213,260**	**93,620**	**47,801**	**48,344**	**14,468**	**683,236**
of which—							
Paid to Consolidated Revenue Fund	173,691	149,614	60,924	44,830	35,824	14,468	479,351
Paid to Trust and other funds	92,052	63,646	32,696	2,970	12,519	..	203,883

In addition to the collections detailed above, the taxes in the following table were collected by other State authorities.

OTHER STATE AUTHORITIES TAXATION: NET COLLECTIONS, BY TYPE OF TAX 1967–68
($'000)

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
Taxes paid to other government authorities—							
Fire Brigades contributions	6,923	5,933	..	871	1,022	364	15,113
Sugar cane assessment	..	..	707	..	..	..	707
Metropolitan improvement rate	..	5,521	..	..	..	..	5,521
Racing taxes	..	..	..	..	..	1,126	1,126
Vehicle registration fees and drivers' licences	..	..	..	..	..	1,046	1,046
Road transport taxes	..	..	..	..	..	79	79
Profits of State Lotteries	16,704	..	3,199	1,735	1,289	..	22,927
Total	**23,627**	**11,454**	**3,906**	**2,606**	**2,311**	**2,615**	**46,519**

The table hereunder shows, for the year 1967–68, the proportions of collections under individual classes of tax to total State taxation revenue.

ALL STATE AUTHORITIES RECEIPTS FROM TAXATION: PROPORTIONS OF INDIVIDUAL TAXES TO TOTAL, 1967-68

(Per cent)

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
Probate and succession duties	16.66	16.75	17.42	16.17	10.19	14.78	16.26
Land tax	12.34	9.33	4.86	15.28	9.28	13.29	10.43
Liquor taxes	4.86	4.34	4.86	4.44	5.07	5.56	4.70
Lottery(*a*), poker machines, racing taxes	19.47	9.84	9.79	7.45	9.09	7.72	13.39
Vehicle registration fees and taxes	14.28	17.73	21.36	23.46	12.39	29.97	19.13
Drivers' etc. licences	2.65	1.34	1.40	2.03	2.65		
Stamp duty (vehicle registration)	1.04	2.42	2.79	3.67	3.07	1.11	2.02
Road transport taxes and road maintenance contributions	5.88	4.01	10.49	4.67	7.03	2.34	5.82
Third party insurance surcharges and duties	..	1.11	..	..	1.38	1.61	0.48
Stamp duties n.e.i.	19.62	23.55	18.56	20.60	33.07	20.86	21.72
Other taxes etc.	3.20	9.58	8.47	2.24	6.76	2.76	6.05
Total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

(*a*) Includes profits of State Lotteries.

The total amounts and the amounts per head raised from all sources of State taxation during the years 1963–64 to 1967–68 are shown in the following tables.

ALL STATE AUTHORITIES RECEIPTS FROM TAXATION: NET COLLECTIONS, 1963-64 TO 1967-68

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
			NET COLLECTIONS ($'000)				
1963–64	208,279	143,359	64,033	30,888	25,386	11,300	483,245
1964–65	224,342	159,752	68,732	37,523	28,207	12,108	530,664
1965–66	238,013	178,695	72,061	39,883	33,229	13,429	575,310
1966–67	259,418	199,366	83,208	45,736	41,738	14,913	644,379
1967–68	289,370	224,714	97,526	50,407	50,655	17,083	729,755
			PER HEAD OF POPULATION ($)				
1963–64	51.06	46.65	40.14	30.18	31.78	31.15	44.20
1964–65	54.16	50.94	42.25	35.66	34.52	33.05	47.63
1965–66	56.54	55.95	43.41	36.87	39.69	36.33	50.68
1966–67	60.72	61.35	49.29	41.43	48.41	39.88	55.79
1967–68	66.56	68.05	56.77	45.08	56.75	45.03	62.07

ALL STATE AUTHORITIES RECEIPTS FROM TAXATION: TOTAL NET COLLECTIONS BY TYPE OF TAX, 1963–64 TO 1967–68

($'000)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Probate and succession duties . .	90,878	91,409	94,431	106,231	118,675
Land tax	55,079	62,703	69,497	72,736	76,103
Liquor tax	23,812	26,211	27,403	31,226	34,299
Lottery(*a*), poker machines, racing taxes	61,632	69,060	75,285	86,926	97,684
Vehicle registration fees and taxes .	88,736	95,116	106,872	115,314	124,726
Drivers' etc., licences . . .	10,479	11,548	13,607	14,377	14,904
Stamp duty (vehicle registration) .	3,524	7,895	10,525	11,576	14,768
Road transport taxes and road maintenance contributions . . .	27,803	31,877	33,936	38,395	42,566
Third party insurance surcharges and duties	2,620	2,815	3,132	3,314	3,472
Stamp duties n.e.i.	93,106	104,451	110,055	125,444	158,490
Other taxes	25,578	27,580	30,569	38,839	44,069
Total	**483,245**	**530,664**	**575,310**	**644,379**	**729,755**

(*a*) Includes profits of State Lotteries.

Taxation collections paid to trust and other funds

Details of taxation collections paid into trust and other funds and included in the foregoing table are shown below.

STATE GOVERNMENT RECEIPTS FROM TAXATION: TOTAL PAYMENTS INTO TRUST AND OTHER FUNDS 1963–64 TO 1967–68

($'000)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Liquor tax	7,210	7,706	8,236	9,120	9,849
Racing tax	1,316	1,647	2,032	2,651	2,970
Poker machines tax . . .	11,268	13,666	15,761	19,650	23,063
Motor vehicle registration . .	75,970	81,350	92,384	99,812	108,195
Drivers' etc. licences . . .	8,527	8,830	9,708	9,729	10,131
Road transport taxes . . .	5,389	5,787	5,862	6,169	6,897
Road maintenance contributions .	17,428	20,625	22,851	26,339	28,929
Fire Brigades contributions . .	2,580	2,840	3,346	3,843	4,235
Stamp duties, n.e.i. . . .	1,032	1,153	1,203	1,146	1,170
Licences, n.e.i.	589	628	615	629	709
Other taxes, etc.	4,763	5,440	5,409	5,973	7,735
Total	**136,072**	**149,669**	**167,406**	**185,063**	**203,883**

State Consolidated Revenue Fund receipts from business undertakings

A considerable proportion of State gross revenue is made up of receipts from business undertakings under the control of the Governments. The most important of these are railways and tramways, harbour works, water supply and sewerage, and electricity supply. In addition, State batteries for the treatment of auriferous ores in Western Australia and various minor revenue-producing services rendered by the Governments of all States are included. For the year 1967–68 the receipts from these sources was $615,431,000 or 25.0 per cent of the receipts from all sources.

STATE CONSOLIDATED REVENUE FUND: RECEIPTS FROM BUSINESS UNDERTAKINGS, BY SOURCE, 1967-68

($'000)

Source	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.(a)*	*Total*
Railways(*b*)	224,966	98,786	91,438	28,611	51,183	..	494,984
Tramways and omnibuses	27,274	..	..	..	..	..	27,274
Harbours, rivers, lights	20,329	(*c*)3,342	..	6,436	3,241	..	33,348
Water supply, sewerage, irrigation and drainage	..	14,022	..	23,211	4,500	57	41,790
Electricity supply	..	13,057	209	..	..	..	13,265
Other	..	621	..	1,998	1,959	192	4,770
Total	**272,570**	**129,827**	**91,647**	**60,256**	**60,883**	**248**	**615,431**

(*a*) Tasmanian transport services are under the separate control of semi-governmental authorities. (*b*) The following contributions to railways revenue from Consolidated Revenue Fund are excluded—New South Wales, $1,600,000; South Australia, $10,000,000. (*c*) Includes Harbour Trust Fund contribution, $1,380,000.

STATE CONSOLIDATED REVENUE FUND: RECEIPTS FROM BUSINESS UNDERTAKINGS 1963-64 TO 1967-68

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.(a)*	*Total*
			RECEIPTS ($'000)				
1963–64	242,824	115,715	81,124	54,904	47,175	236	541,978
1964–65	255,024	127,416	79,813	57,256	42,631	348	562,487
1965–66	236,989	126,773	81,717	58,597	49,267	602	553,946
1966–67	257,872	140,627	85,384	61,996	56,525	246	602,650
1967–68	272,570	129,827	91,647	60,256	60,883	248	615,431
			PER HEAD OF POPULATION ($)				
1963–64	59.53	37.65	50.86	53.65	59.06	0.65	49.58
1964–65	61.56	40.63	49.06	54.42	52.17	0.95	50.49
1965–66	56.30	39.69	49.22	54.16	58.84	1.63	48.79
1966–67	60.35	43.27	50.58	56.16	65.56	0.66	52.17
1967–68	62.70	39.31	53.35	53.89	68.21	0.65	52.34

(*a*) Tasmanian transport services are under the separate control of semi-governmental authorities.

STATE CONSOLIDATED REVENUE FUND: TOTAL RECEIPTS FROM BUSINESS UNDERTAKINGS, BY SOURCE, 1963-64 TO 1967-68

($'000)

Source	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Railways, tramways and omnibuses	465,557	485,800	473,483	508,846	522,259
Harbour services	25,058	27,371	27,142	30,010	33,348
Water supply, sewerage, irrigation and drainage	38,548	33,424	37,370	41,206	41,790
Other	12,815	15,892	15,951	22,588	18,035
Total	**541,978**	**562,487**	**553,946**	**602,650**	**615,431**

For further information on the finances of the various types of business undertakings in the States *see* the chapters Transport, Communication and Travel, and Local Government, of this Year Book.

Other State Consolidated Revenue Fund receipts

State land receipts

The receipts from the sale and rental of Crown lands have, with few exceptions, been treated from the earliest times as forming part of the Consolidated Revenue Funds, and have been applied to meet ordinary expenses. The following table shows the revenue from sales and rentals of Crown lands for the year 1967–68.

STATE CONSOLIDATED REVENUE FUND: LAND RECEIPTS, BY SOURCE, 1967-68
($'000)

Source	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
Sales	2,896	484	2,430	245	374	185	6,614
Conditional purchases .	477	..	..	19	661	..	1,157
Rentals(*a*) . . .	15,958	2,438	9,867	1,810	7,408	167	37,648
Forestry . . .	3,267	5,710	..	..	3,402	1,603	13,981
Other	318	512	984	..	..	18	1,832
Total . . .	**22,917**	**9,144**	**13,281**	**2,074**	**11,845**	**1,972**	**61,233**

(*a*) Includes mining royalties, rents, etc.

The total land receipts for all States for the years 1963–64 to 1967–68 respectively were: $38,478,000, $56,458,000, $62,281,000, $61,635 000, and $61,233,000.

State receipts from Commonwealth grants

Commonwealth grants to the States represent a very large proportion of the States' receipts. In 1967–68 the total amount (excluding sundry minor items) paid to the Consolidated Revenue Funds of the States was $998,000,000 (40.5 per cent). Details were as follows: contribution towards interest on States' debts under the Financial Agreement, $15,170,000; special grants to the States of Western Australia and Tasmania, $35,407,000; financial assistance, $907,539,000; drought assistance, $24,605,000; grants to universities, $9,695,000; and other grants, $5,584,000. In addition to these, the States receive a number of other grants which are paid to Trust Funds. The main items in this class are the contribution to the sinking fund on States' debts ($20,387,000 in 1967–68) paid to the National Debt Sinking Fund, grants for Commonwealth Aid Roads ($160,000,000 in 1967–68), and grants for universities ($46,546,000 in 1967–68) paid to State Trust Funds. More detailed information concerning Commonwealth grants to the States is given on pages 707–11.

State receipts from Commonwealth National Welfare Fund

The States also receive payments from the Commonwealth in respect of hospital and pharmaceutical benefits, milk for school children, and reimbursement of maintenance expenditure on tuberculosis sanatoriums. These receipts are paid into Consolidated Revenue Funds or Trust Funds according to the varying accounting procedures in the States. In 1967–68 the total amount paid to State Consolidated Revenue Funds was $25,232,000 (1.0 per cent). This amount was made up of hospital benefits, $3,463,000; pharmaceutical benefits, $8,341,000; milk for school children, $3,357,000; tuberculosis—reimbursement of maintenance expenditure, $9,001,000; other, $1,070,000.

State surplus revenue

STATE SURPLUS REVENUE, 1963-64 TO 1967-68

Year	*N.S.W.(a)*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
			TOTAL AMOUNT ($'000)				
1963–64	544	−505	443	3,251	−2,792	−1,185	−246
1964–65	−5,069	..	−4,076	−2,622	−4,695	−1,619	−18,083
1965–66	−4,687	−8,135	−3,520	−6,834	−10	−2,021	−25,208
1966–67	−3,147	..	258	106	−28	−572	−3,383
1967–68	459	−2,794	970	−2,860	829	−1,850	−5,246
			PER HEAD OF POPULATION ($)				
1963–64	0.13	−0.16	0.28	3.18	−3.50	−3.27	−0.02
1964–65	−1.22	..	−2.51	−2.49	−5.75	−4.42	−1.62
1965–66	−1.11	−2.55	−2.12	−6.32	−0.01	−5.47	−2.22
1966–67	−0.74	..	0.15	0.10	−0.03	−1.53	−0.29
1967–68	0.11	−0.85	0.56	−2.56	0.93	−4.88	−0.45

(*a*) *See* page 734.
Minus sign (−) indicates deficit.

State Loan Funds

The principal purpose of State public borrowing is to assist in financing the development of the resources of the country, e.g. the establishment and operation of railway systems and electricity undertakings, construction of roads and water and sewerage works, and improvements to harbours and rivers.

Statements relating to 'gross' loan expenditure are shown on page 745. Gross expenditure represents the amounts disbursed during each year. Details of 'net' loan expenditure, i.e. gross expenditure less any credits to the Loan Fund during the year on account of repayments of advances to local governing bodies, settlers, etc., the sale of assets, and transfers from other funds, may be found in the annual bulletin *State, Territory and Local Government Authorities' Finance and Government Securities*. Such moneys are credited to the Loan Fund in the year of repayment irrespective of when the advance was made.

Gross loan expenditure

Particulars of gross loan expenditure on works, services, etc., are shown in the following tables.

STATE GROSS LOAN EXPENDITURE ON WORKS, SERVICES, ETC.: DETAILS, 1967-68

($'000)

	N.S.W.	*Vic.(a)*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
Public works and services—							
Railways	26,800	16,614	24,716	5,394	12,963	850	87,337
Tramways and omnibuses	1,100	..	..	..	300	..	1,400
Roads	4,700	1,841	(*b*)−616	48	..	1,288	25,607
Bridges							
Harbours and rivers	11,537	1,886	271	2,209	2,444		
Lights and lighthouses	..	..	..	..			
Water supply	21,218	18,380	..	15,887	13,543	2,551	83,847
Sewerage	..	1,166	..	11,101			
Electricity and gas supplies	15,060	14,570	4,215	6,700	4,543	20,000	65,089
Public buildings	78,535	70,351	25,598	22,032	20,292	12,313	229,122
Loans and grants to local bodies	1,483	2,362	13,715	..	58	76	17,693
Housing(*c*)	52	2,685	1,434	700	2,648	75	7,594
Other public works, etc.	370	609	..	1,074	600	1,196	3,849
Primary production—							
Soldier settlement	29	2	..	..	..	..	31
Land for settlement	2,771	2,308	167	..	..	200	5,445
Advances to settlers	200	259	..	1,030	..	609	2,098
Water conservation, irrigation and drainage	17,927	(*d*)	7,933	2,588	1,041	..	29,488
Vermin-proof fencing	..	1	..	(*e*)	..	..	1
Agriculture	1,700	1,471	38	..	796	291	4,296
Agricultural Bank	..	..	3,680	..	..	..	3,680
Forestry	2,770	2,759	5,100	2,250	400	1,450	14,729
Mines and mineral resources	1,572	230	1,252	208	70	2,554	5,885
Other	2,065	3,696	..	480	63	..	6,304
Other purposes	50	(*f*)3,192	..	5,414	596	1,349	10,600
Total	**189,938**	**144,383**	**87,503**	**77,115**	**60,356**	**44,802**	**604,097**

(*a*) Expenditure from loan funds and on account of loans; includes expenditure from loan funds, from Treasurer's Advance Account, and from State Loans Repayment Fund. (*b*) Represents transfer of liability on account of expenditure incurred in earlier years. The amount involved has been debited against the item Loans and grants to local bodies, and included in the expenditure shown for 1967–68. (*c*) Excludes expenditure from Commonwealth loans under Commonwealth-State Housing Agreement. (*d*) Included in Public works and services—Water supply. (*e*) Included in item Advances to settlers. (*f*) Includes Rural Finance and Settlement Commission, for advances to rural industries $1,836,000

STATE GROSS LOAN EXPENDITURE ON WORKS, SERVICES, ETC. 1963-64 TO 1967-68

Year	*N.S.W.*	*Vic.(a)*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
			GROSS LOAN EXPENDITURE ($'000)				
1963–64	148,897	117,750	69,647	63,496	47,270	34,988	482,048
1964–65	160,441	127,855	77,604	73,597	50,736	35,667	525,900
1965–66	170,395	130,848	77,595	74,974	52,646	39,177	545,635
1966–67	177,299	137,562	81,100	77,624	55,253	39,744	568,582
1967–68	189,938	144,383	87,503	77,115	60,356	44,802	604,097
			PER HEAD OF POPULATION ($)				
1963–64	36.50	38.31	43.67	62.04	59.17	96.45	44.09
1964–65	38.73	40.77	47.70	69.95	62.09	97.35	47.20
1965–66	40.48	40.97	46.74	69.30	62.88	106.00	48.06
1966–67	41.50	42.33	48.04	70.31	64.09	106.29	49.22
1967–68	43.69	43.72	50.94	68.96	67.62	118.10	50.65

(*a*) *See* footnote (*a*) to previous table.

Total loan expenditure

The preceding tables do not include particulars of expenditure on loan discounts and flotations, the funding of deficits, the retirement of treasury bills, and similar items of a nature other than works, services, etc. Summaries of the gross and net expenditure and repayments in respect of all loan purposes for the years 1965–66 to 1967–68 are shown in the next table.

STATE LOAN EXPENDITURE: SUMMARY, 1965–66 TO 1967–68

($'000)

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
				1965–66			
Works and services—							
Gross expenditure	170,395	130,848	77,595	74,974	52,646	39,177	545,635
Net expenditure	154,216	122,702	66,466	64,535	47,800	36,565	492,284
Repayments	16,179	8,146	11,129	10,439	4,846	2,612	53,352
Other than works, etc.(*a*)—							
Gross expenditure	589	1,036	..	192	280	169	2,267
Net expenditure	589	1,036	1,500	..	143	9	3,277
Repayments	..	..	−1,500	192	(*b*)137	160	−1,010
Total loan expenditure—							
Gross	**170,984**	**131,884**	**77,595**	**75,167**	**52,926**	**39,346**	**547,902**
Net	**154,806**	**123,738**	**67,966**	**64,535**	**47,943**	**36,573**	**495,561**
Repayments	**16,179**	**8,146**	**9,629**	**10,632**	**4,983**	**2,773**	**52,341**
				1966–67			
Works and services—							
Gross expenditure	177,299	137,562	81,100	77,624	55,253	39,744	568,582
Net expenditure	162,161	128,662	71,021	66,653	51,015	36,395	515,907
Repayments	15,138	8,900	10,079	10,971	4,238	3,349	52,675
Other than works, etc.(*a*)—							
Gross expenditure	7,158	4,242	..	185	228	373	12,186
Net expenditure	7,158	4,242	1,500	..	74	241	13,215
Repayments	..	..	−1,500	185	(*b*)154	132	−1,029
Total loan expenditure—							
Gross	**184,457**	**141,804**	**81,100**	**77,809**	**55,481**	**40,118**	**580,768**
Net	**169,319**	**132,904**	**72,521**	**66,653**	**51,090**	**36,636**	**529,122**
Repayments	**15,138**	**8,900**	**8,579**	**11,156**	**4,391**	**3,482**	**51,646**
				1967–68			
Works and services—							
Gross expenditure	189,938	144,383	87,503	77,115	60,356	44,802	604,097
Net expenditure	170,055	135,696	75,090	65,223	53,177	41,030	540,270
Repayments	19,883	8,687	12,413	11,892	7,179	3,772	63,826
Other than works, etc.(*a*)—							
Gross expenditure	1,821	4,314	..	224	236	1,191	7,785
Net expenditure	1,821	4,314	1,500	..	67	1,098	8,799
Repayments	..	..	−1,500	224	(*b*)169	93	−1,014
Total loan expenditure—							
Gross	**191,759**	**148,697**	**87,503**	**77,338**	**60,593**	**45,993**	**611,882**
Net	**171,875**	**140,010**	**76,590**	**65,223**	**53,244**	**42,128**	**549,070**
Repayments	**19,883**	**8,687**	**10,913**	**12,116**	**7,348**	**3,865**	**62,812**

(*a*) Includes exchange, discounts and flotation expenses, revenue and general cash deficits. (*b*) From Consolidated Revenue Fund.

Information relating to the government securities and borrowings on issue on behalf of the States is given in the division on Government Securities on Issue: Commonwealth and States (*see* page 748).

COMMONWEALTH AND STATE FINANCE

Consolidated Revenue Fund expenditure and receipts

The following table shows the aggregate expenditure and receipts of the Consolidated Revenue Funds of the Commonwealth and States for each of the years 1963–64 to 1967–68. In the table the combined Commonwealth and State totals have been adjusted to exclude major duplications, but the separate Commonwealth and State figures are as shown in other divisions of this chapter. The items excluded from the total figures are: payments made by the Commonwealth to the States and included in the State Consolidated Revenue Funds on account of financial assistance grants in 1963–64 to 1967–68, interest under the Financial Agreement, special grants, special financial assistance, grants to universities, specific purpose payments, Tuberculosis Act capital expenditure, National Welfare Fund payments, and estimated payments of pay-roll tax by the States to the Commonwealth. There are other relatively minor payments for which adjustments have not been made, and the adjusted figures are therefore still slightly overstated.

COMMONWEALTH AND STATE CONSOLIDATED REVENUE FUND EXPENDITURE AND RECEIPTS, 1963-64 TO 1967-68

Year	*Expenditure*			*Receipts*		
	Commonwealth	*States*	*Total*	*Commonwealth*	*States*	*Total*
	$'000	$'000	$m	$'000	$'000	$m
1963–64 . . .	3,809,376	1,829,333	4,885.4	3,809,376	1,829,087	4,885.1
1964–65 . . .	4,418,178	1,965,133	5,605.2	4,418,178	1,947,050	5,587.2
1965–66 . . .	4,879,201	2,120,259	6,105.4	4,879,201	2,095,051	6,080.2
1966–67 . . .	5,227,721	2,290,254	6,545.4	5,227,721	2,286,873	6,548.9
1967–68 . . .	5,760,480	2,468,603	7,179.5	5,760,480	2,463,357	7,174.2

Taxation collections

The following table shows the combined Commonwealth and State taxation collections and the amount per head of population for the years 1963–64 to 1967–68. Taxation collections by other State authorities are included.

COMMONWEALTH AND STATE TAXATION: TOTAL NET COLLECTIONS BY TYPE OF TAX, 1963-64 TO 1967-68

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
	NET COLLECTIONS ($'000)				
Income taxes .	1,873,259	2,294,566	2,547,791	2,727,855	3,034,539
Estate, gift, probate and succession duties	137,237	140,248	136,750	155,423	181,935
Customs and excise duty . . .	814,961	899,642	1,022,831	1,081,360	1,167,423
Sales tax	325,189	362,857	370,043	380,695	416,626
Payroll tax . . .	136,443	150,078	161,943	172,232	184,416
Land taxes . . .	55,079	62,703	69,495	72,736	76,103
Liquor taxes . . .	23,812	26,211	27,403	31,225	34,299
Lottery(*a*), poker machines and racing taxes	61,632	69,059	75,285	86,925	97,684
Taxes on ownership and operation of motor vehicles	133,824	150,003	168,913	183,918	201,516
Stamp duties, n.e.i. . . .	93,147	104,493	110,119	125,498	158,563
Licences and registration fees, n.e.i. .	4,002	3,828	5,596	5,082	5,808
Other taxes . . .	44,550	55,611	66,398	77,173	87,219
Total	**3,703,135**	**4,319,299**	**4,762,567**	**5,100,122**	**5,646,131**
of which					
Commonwealth taxation (including Territories) . . .	3,219,885	3,788,636	4,187,257	4,455,744	4,916,375
State taxation . . .	483,245	530,664	575,310	644,379	729,755

(*a*) Includes profits of State Lotteries.

COMMONWEALTH AND STATE TAXATION: TOTAL NET COLLECTIONS BY TYPE OF TAX, 1963–64 TO 1967–68—*continued*

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
	PER HEAD OF POPULATION ($)				
Income taxes	169.38	203.44	221.54	232.98	254.43
Estate, gift, probate and succession duties	12.41	12.43	11.89	13.27	15.25
Customs and excise duty	73.69	79.76	88.94	92.36	97.88
Sales tax	29.40	32.17	32.18	32.51	34.94
Payroll tax	12.34	13.31	14.08	14.71	15.46
Land taxes	4.98	5.56	6.04	6.21	6.38
Liquor taxes	2.15	2.32	2.38	2.67	2.88
Lottery(*a*), poker machines and racing taxes	5.57	6.12	6.55	7.42	8.19
Taxes on ownership and operation of motor vehicles	12.10	13.30	14.69	15.71	16.90
Stamp duties, n.e.i.	8.42	9.26	9.58	10.72	13.29
Licences and registration fees, n.e.i.	0.36	0.34	0.49	0.43	0.48
Other taxes	4.03	4.93	5.77	6.59	7.31
Total	**334.84**	**382.96**	**414.11**	**435.59**	**473.41**
of which—					
Commonwealth taxation (including Territories)	291.15	335.91	364.09	380.55	412.22
State taxation	43.70	47.05	50.02	55.03	61.19

(*a*) Includes profits of State Lotteries.

GOVERNMENT SECURITIES ON ISSUE: COMMONWEALTH AND STATES

For the following reasons, Government Securities on Issue, as set out in the tables in this division, may not be aggregated without adjustment to indicate what is sometimes described as the 'public debt' or 'net public debt' of the Commonwealth and State Governments. There are forms of debt not evidenced by the issue of securities. Again, some of the securities included in the tables are held by the Governments themselves. For example, a State Government may hold temporarily, or even for long periods, securities issued by the Commonwealth Government. The Commonwealth Government itself, through such institutions as the National Debt Commission, or through the Trust Funds, holds large investments in securities issued, either directly by itself or on behalf of the States. In addition, some of the securities issued on behalf of the States and held by the Commonwealth Government represent the proceeds of overseas loans, securities for which were issued directly by the Commonwealth Government. From the point of view of the aggregate net debt of the Commonwealth and the States, it would thus involve duplication if the sum of the securities on issue were to be regarded as representing the 'net public debt'.

Under the Financial Agreement between the Commonwealth and the States in 1927 the Commonwealth Government accepted responsibility for the securities of the State Governments then on issue, and was empowered to arrange for all future borrowings on behalf of the Commonwealth and the States and to issue Commonwealth securities for all money borrowed. The Commonwealth is reimbursed by the States for interest, exchange, etc., paid on their behalf, and the securities are redeemed from the National Debt Sinking Fund to which both the Commonwealth and State Governments make contributions.

In the statistical tables relating to Government securities, details of securities on issue, annual interest liability and average rate of interest liability, except on pages 752–4, are shown in the currencies in which they are repayable or payable respectively. Australian currency equivalents for overseas loans have been calculated using International Monetary Fund par rates of exchange (and the calculated equivalent for Swiss francs) ruling at 30 June in each year shown. Rates of exchange to $A at 30 June 1968 were as follows: £Sterling, 0.46667; United States dollars, 1.1200; Canadian dollars, 1.2108; Swiss francs, 4.8978; Netherlands guilders, 4.0544; Deutsche marks, 4.4800.

The full text of the original Financial Agreement between the Commonwealth and the States was given in Year Book No. 31, page 21, a summary of the original Agreement as affected by the subsequent Agreements in later issues up to No. 37 (*see* pages 685–90), and a summary of the main provisions in further issues up to No. 50 (*see* pages 952–3).

Government securities on issue: Commonwealth and States

Government securities on issue, annual interest payable and average rate of interest

In the following tables details are given of government securities on issue on account of the Commonwealth and States, annual interest payable and average rates of interest.

GOVERNMENT SECURITIES ON ISSUE: COMMONWEALTH AND STATES 30 JUNE 1968

	Currency in which repayable							*Total—Australian currency equivalents(a)*
	Australian currency	*Sterling*	*United States dollars*	*Canadian dollars*	*Swiss francs*	*Netherlands guilders*	*Deutsche marks*	
	$A'000	£Stg'000	$US '000	$Can '000	Sw fr '000	f '000	DM '000	$A'000
For Commonwealth purposes	2,674,987	80,442	705,120	39,939	239,704	6,673	178,240	3,600,291
On account of States—								
New South Wales . .	2,497,749	93,762	72,962	4,093	15,833	9,691	..	2,772,812
Victoria	1,896,160	29,004	37,027	3,294	12,732	7,790	..	1,998,614
Queensland . . .	1,015,768	24,165	26,569	1,652	6,391	3,967	..	1,094,921
South Australia . .	1,003,470	24,221	20,013	1,751	6,774	3,911	..	1,077,035
Western Australia . .	723,810	31,299	12,547	1,259	4,863	3,047	..	804,866
Tasmania . . .	546,538	4,191	11,955	957	3,703	2,255	..	568,296
Total, States . .	*7,683,495*	*206,642*	*181,073*	*13,006*	*50,296*	*30,661*	..	*8,316,544*
Total, Commonwealth and States—								
Stock and bonds . .	9,197,887	282,088	323,509	24,607	290,000	37,334	100,000	10,202,265
Treasury bills, internal .	685,000	..	..	..	..	..	..	685,000
Treasury notes . .	273,735	..	.	..	..	..	..	273,735
Treasury bills, public .	141,000	..	..	..	..	..	..	141,000
International Bank loans	..	..	148,392	26,288	..	..	78,240	171,668
Aircraft loans . .	..	..	155,717	2,050	..	..	..	140,726
Export—Import Bank—Other . . .	..	..	25,000	..	..	..	..	22,321
Debentures . . .	50,168	..	..	..	..	..	..	50,168
Loans for defence purposes . . .	..	..	233,575	..	..	..	..	208,549
Balance of securities of States taken over by Commonwealth and still represented by State securities . . .	..	4,166	..	..	..	..	..	8,927
Other	10,691	(*b*)830	..	..	..	..	..	12,470
Grand total—								
Currencies in which repayable . .	**10,358,481**	**287,084**	**886,193**	**52,944**	**290,000**	**37,334**	**178,240**	..
Australian currency equivalents(*a*)$A'000	**10,358,481**	**615,179**	**791,243**	**43,727**	**59,210**	**9,208**	**39,786**	**11,916,836**

(*a*) For rates of exchange to $A ruling at 30 June 1968 *see* page 748. (*b*) State securities issued by the Government of Western Australia to meet the costs of acquisition of the Midland Railway Company of Western Australia Ltd.

GOVERNMENT SECURITIES ON ISSUE: COMMONWEALTH AND STATES ANNUAL INTEREST PAYABLE, 30 JUNE 1968

	Currency in which payable							*Total—Australian currency equivalents(a)*
	Australian currency	*Sterling*	*United States dollars*	*Canadian dollars*	*Swiss francs*	*Netherlands guilders*	*Deutsche marks*	
AMOUNT								
	$A'000	£Stg'000	$US '000	$Can '000	Sw fr '000	f '000	DM '000	$A'000
For Commonwealth purposes	96,063	4,255	36,848	1,878	10,537	334	10,999	144,319
On account of States—								
New South Wales . .	121,072	4,369	3,817	235	712	485	..	134,301
Victoria	92,891	1,439	1,934	189	573	390	..	98,070
Queensland . . .	48,416	978	1,426	95	288	198	..	51,970
South Australia . .	48,868	881	1,053	101	305	196	..	51,889
Western Australia . .	35,142	1,079	637	72	219	152	..	38,165
Tasmania . . .	26,673	196	645	55	167	113	..	27,776
Total, States . .	***373,064***	***8,943***	***9,512***	***748***	***2,263***	*1,533*	..	*402,178*
Grand total—								
Currencies in which repayable . .	**469,127**	**13,198**	**46,360**	**2,625**	**12,800**	**1,867**	**10,999**	..
Australian currency equivalents(*a*)$A'000	**469,127**	**28,282**	**41,393**	**2,168**	**2,613**	**460**	**2,455**	**546,497**

(*a*) For rates of exchange to $A ruling at 30 June 1968 *see* page 748.

GOVERNMENT SECURITIES ON ISSUE: COMMONWEALTH AND STATES ANNUAL INTEREST PAYABLE, 30 JUNE 1968—*continued*

	Currency in which payable							*Total—Australian currency equivalents(a)*
	Australian currency	*Sterling*	*United States dollars*	*Canadian dollars*	*Swiss francs*	*Netherlands guilders*	*Deutsche marks*	
AVERAGE RATE OF INTEREST LIABILITY (Per cent)								
For Commonwealth purposes	3.60	5.29	5.23	4.70	4.40	5.00	6.17	4.02
On account of States—								
New South Wales	4.85	4.66	5.23	5.75	4.50	5.00	..	4.84
Victoria	4.90	4.96	5.22	5.75	4.50	5.00	..	4.91
Queensland	4.77	4.05	5.37	5.75	4.50	5.00	..	4.72
South Australia	4.87	3.64	5.26	5.75	4.50	5.00	..	5.15
Western Australia	4.86	3.45	5.08	5.75	4.50	5.00	..	4.74
Tasmania	4.88	4.68	5.40	5.75	4.50	5.00	..	4.89
Total, States	*4.86*	*4.32*	*5.25*	*5.75*	*4.50*	*5.00*	..	*4.84*
Grand total	4.53	4.60	5.23	4.96	4.41	5.00	6.17	4.59

(*a*) For rates of exchange to $A ruling at 30 June 1968 *see* page 748.

GOVERNMENT SECURITIES ON ISSUE: COMMONWEALTH AND STATES 30 JUNE 1964 TO 1968

		30 June—				
		1964	*1965*	*1966*	*1967*	*1968*
For Commonwealth purposes—						
Australian currency	$A'000	2,568,714	2,512,888	2,520,779	2,531,402	2,674,987
Sterling	£Stg'000	79,393	76,253	73,398	69,262	80,442
United States dollars	$US'000	351,347	368,641	380,067	516,494	705,120
Canadian dollars	$Can'000	50,376	49,665	49,191	48,479	39,939
Swiss francs	Sw fr'000	194,288	194,288	194,088	239,711	239,704
Netherlands guilders	f '000	7,150	7,150	7,150	7,150	6,673
Deutsche marks	DM'000	37,901	84,596	84,596	84,596	178,240
Total, Commonwealth—Australian currency equivalents(a)	$A'000	*3,172,396*	*3,133,997*	*3,144,518*	*3,275,339*	*3,600,291*
On account of States—						
Australian currency	$A'000	5,749,642	6,182,321	6,613,686	7,145,660	7,683,494
Sterling	£Stg'000	284,795	268,670	255,670	233,880	206,642
United States dollars	$US'000	220,966	229,884	236,610	194,770	181,073
Canadian dollars	$Can'000	16,065	15,633	14,690	13,852	13,006
Swiss francs	Sw fr'000	50,296	50,296	50,296	50,296	50,296
Netherlands guilders	f '000	32,850	32,850	32,850	32,850	30,661
Total, States—Australian currency equivalents(a)	$A'000	*6,690,562*	*7,090,533*	*7,494,623*	*7,934,074*	*8,316,544*
Total, Commonwealth and States—Australian currency equivalents(a)	**$A'000**	**9,862,958**	**10,224,530**	**10,639,141**	**11,209,413**	**11,916,836**

(*a*) For rates of exchange to $A ruling at 30 June 1968 *see* page 748.

GOVERNMENT SECURITIES ON ISSUE: COMMONWEALTH AND STATES ANNUAL INTEREST PAYABLE, 30 JUNE 1964 TO 1968

		30 June—				
		1964	*1965*	*1966*	*1967*	*1968*
		AMOUNT				
For Commonwealth purposes—						
Australian currency	$A'000	89,405	89,540	91,723	91,848	96,063
Sterling	£Stg'000	3,714	3,608	3,509	3,367	4,255
United States dollars	$US'000	17,334	18,202	18,955	26,577	36,848
Canadian dollars	$Can'000	2,327	2,297	2,275	2,244	1,878
Swiss francs	Sw fr'000	7,982	7,982	7,973	10,537	10,537
Netherlands guilders	f'000	357	358	357	357	334
Deutsche marks	DM'000	2,116	4,801	4,801	4,801	10,999
Total, Commonwealth—Australian currency equivalents(a)	$A'000	*118,280*	*119,498*	*122,087*	*129,159*	*144,319*
On account of States—						
Australian currency	$A'000	255,105	283,118	313,379	344,583	373,064
Sterling	£Stg'000	11,529	11,034	10,632	9,871	8,943
United States dollars	$US'000	10,889	11,428	11,889	10,231	9,512
Canadian dollars	$Can'000	924	899	845	796	748
Swiss francs	Sw fr'000	2,263	2,263	2,263	2,263	2,263
Netherlands guilders	f'000	1,643	1,643	1,643	1,643	1,533
Total, States—Australian currency equivalents(a)	$A'000	*295,278*	*322,515*	*352,138*	*379,921*	*402,178*
Total, Commonwealth and States—Australian currency equivalents(a)	**$A'000**	**413,558**	**442,014**	**474,225**	**509,080**	**546,497**
		AVERAGE RATE OF INTEREST LIABILITY (Per cent)				
For Commonwealth purposes—						
Australian currency		3.48	3.56	3.64	3.63	3.60
Sterling		4.68	4.73	4.78	4.86	5.29
United States dollars		4.93	4.94	4.99	5.15	5.23
Canadian dollars		4.62	4.62	4.63	4.63	4.70
Swiss francs		4.11	4.11	4.11	4.40	4.40
Netherlands guilders		5.00	5.00	5.00	5.00	5.00
Deutsche marks		4.58	5.68	5.68	5.68	6.17
Total, Commonwealth—Australian currency equivalents(a)		*3.73*	*3.82*	*3.88*	*3.94*	*4.02*
On account of States—						
Australian currency		4.44	4.58	4.74	4.82	4.86
Sterling		4.05	4.11	4.16	4.22	4.32
United States dollars		4.93	4.97	5.02	5.25	5.25
Canadian dollars		5.75	5.75	5.75	5.75	5.75
Swiss francs		4.50	4.50	4.50	4.50	4.50
Netherlands guilders		5.00	5.00	5.00	5.00	5.00
Total, States—Australian currency equivalents(a)		*4.41*	*4.55*	*4.70*	*4.79*	*4.84*
Total, Commonwealth and States—Australian currency equivalents(a)		4.19	4.33	4.46	4.54	4.59

(a) For rates of exchange to $A ruling at 30 June 1968 *see* page 748.

Government securities on issue and annual interest payable—Australian currency

In the following tables, details, including per capita figures, are shown in Australian currency equivalents calculated at rates of exchange ruling at 30 June of each of the years concerned.

GOVERNMENT SECURITIES ON ISSUE: COMMONWEALTH AND STATES 30 JUNE 1968—AUSTRALIAN CURRENCY

	Currency in which repayable							
	Australian currency	*Sterling*	*United States dollars*	*Canadian dollars*	*Swiss francs*	*Netherlands guilders*	*Deutsche marks*	*Total*
	SECURITIES ON ISSUE ($A'000)							
For Commonwealth purposes—								
Treasury Bills, internal	685,000	..	..	..	..	..	..	685,000
Other short-term	414,735	..	..	..	..	..	..	414,735
Other	1,575,252	172,375	629,571	32,986	48,941	1,646	39,786	2,500,557
Total, Commonwealth	*2,674,987*	*172,375*	*629,571*	*32,986*	*48,941*	*1,646*	*39,786*	*3,600,291*
On account of States—								
New South Wales	2,497,749	200,917	65,145	3,380	3,233	2,390	..	2,772,812
Victoria	1,896,160	62,151	33,060	2,721	2,600	1,921	..	1,998,614
Queensland	1,015,768	51,782	23,722	1,364	1,305	978	..	1,094,921
South Australia	1,003,470	51,902	17,869	1,446	1,383	965	..	1,077,035
Western Australia	723,810	67,069	11,203	1,040	993	752	..	804,866
Tasmania	546,538	8,981	10,674	790	756	556	..	568,296
Total, States	*7,683,494*	*442,804*	*161,672*	*10,742*	*10,269*	*7,562*	..	*8,316,544*
Total, Commonwealth and States—								
Treasury Bills, internal	685,000	..	..	..	..	..	..	685,000
Other short-term	414,735	..	..	..	..	..	..	414,735
Other	9,258,746	615,179	791,243	43,727	59,210	9,208	39,786	10,817,099
Grand total	**10,358,481**	**615,179**	**791,243**	**43,727**	**59,210**	**9,208**	**39,786**	**11,916,836**
	PER HEAD OF POPULATION ($A)							
For Commonwealth purposes	222.34	14.33	52.33	2.74	4.07	0.14	3.31	299.26
On account of States—								
New South Wales	569.95	45.85	14.87	0.77	0.74	0.55	..	632.71
Victoria	570.41	18.70	9.95	0.82	0.78	0.58	..	601.24
Queensland	586.38	29.89	13.69	0.79	0.75	0.56	..	632.07
South Australia	891.81	46.13	15.88	1.29	1.23	0.86	..	957.18
Western Australia	795.91	73.75	12.32	1.14	1.09	0.83	..	885.04
Tasmania	1,430.73	23.51	27.94	2.07	1.98	1.45	..	1,487.68
Total, States	*648.09*	*37.35*	*13.64*	*0.91*	*0.87*	*0.64*	..	*701.49*
Total Commonwealth and States	**860.99**	**51.13**	**65.77**	**3.63**	**4.92**	**0.77**	**3.31**	**990.53**
	ANNUAL INTEREST PAYABLE ($A'000)							
For Commonwealth purposes	96,063	9,118	32,900	1,551	2,151	82	2,455	144,319
On account of States—								
New South Wales	121,072	9,362	3,408	194	145	120	..	134,301
Victoria	92,891	3,084	1,727	156	117	96	..	98,070
Queensland	48,416	2,096	1,273	78	59	49	..	51,970
South Australia	48,868	1,888	940	83	62	48	..	51,889
Western Australia	35,142	2,312	569	59	45	37	..	38,165
Tasmania	26,673	420	576	45	35	28	..	27,776
Total, States	*373,064*	*19,163*	*8,493*	*618*	*462*	*378*	..	*402,178*
Total, Commonwealth and States	**469,127**	**28,282**	**41,393**	**2,168**	**2,613**	**460**	**2,455**	**546,497**

GOVERNMENT SECURITIES ON ISSUE: COMMONWEALTH AND STATES 30 JUNE 1968—AUSTRALIAN CURRENCY—*continued*

ANNUAL INTEREST PAYABLE PER HEAD OF POPULATION

($A)

	Currency in which repayable—							
	Australian currency	*Sterling*	*United States dollars*	*Canadian dollars*	*Swiss francs*	*Netherlands guilders*	*Deutsche marks*	*Total*
For Commonwealth purposes	7.98	0.76	2.73	0.13	0.18	0.01	0.20	12.00
On account of States—								
New South Wales	27.63	2.14	0.78	0.04	0.03	0.03	..	30.65
Victoria	27.94	0.93	0.52	0.05	0.04	0.03	..	29.50
Queensland	27.95	1.21	0.73	0.05	0.03	0.03	..	30.00
South Australia	43.43	1.68	0.84	0.07	0.05	0.04	..	46.11
Western Australia	38.64	2.54	0.63	0.06	0.05	0.04	..	41.97
Tasmania	69.82	1.10	1.51	0.12	0.09	0.07	..	72.71
Total, States	*31.47*	*1.62*	*0.72*	*0.05*	*0.04*	*0.03*	..	*33.92*
Total, Commonwealth and States	**38.99**	**2.35**	**3.44**	**0.18**	**0.22**	**0.04**	**0.20**	**45.42**

GOVERNMENT SECURITIES ON ISSUE: COMMONWEALTH AND STATES SECURITIES ON ISSUE AND ANNUAL INTEREST PAYABLE, 30 JUNE 1964 TO 1968—AUSTRALIAN CURRENCY

($A'000)

SECURITIES ON ISSUE

	30 June—				
	1964	*1965*	*1966*	*1967*	*1968*
For Commonwealth purposes—					
Treasury Bills, Internal	599,000	632,400	681,500	679,500	685,000
Other short-term	330,570	196,432	195,996	178,452	414,735
Other	2,242,826	2,305,165	2,267,022	2,417,388	2,500,557
Total, Commonwealth	*3,172,396*	*3,133,997*	*3,144,518*	*3,275,339*	*3,600,291*
On account of States—					
New South Wales	2,283,382	2,407,364	2,531,928	2,666,905	2,772,812
Victoria	1,577,722	1,679,339	1,781,544	1,893,069	1,998,614
Queensland	862,774	919,706	977,046	1,038,902	1,094,921
South Australia	870,504	919,446	970,473	1,027,080	1,077,035
Western Australia	652,796	691,660	730,700	772,511	804,866
Tasmania	443,384	473,019	502,932	535,606	568,296
Total, States	*6,690,562*	*7,090,533*	*7,494,623*	*7,934,074*	*8,316,544*
Total, Commonwealth and States—					
Treasury Bills, internal	599,000	632,400	681,500	679,500	685,000
Other short-term	330,570	196,432	195,996	178,452	414,735
Other	8,933,388	9,395,698	9,761,645	10,351,461	10,817,099
Grand total	**9,862,958**	**10,224,530**	**10,639,141**	**11,209,413**	**11,916,836**

GOVERNMENT SECURITIES ON ISSUE: COMMONWEALTH AND STATES SECURITIES ON ISSUE AND ANNUAL INTEREST PAYABLE, 30 JUNE 1964 TO 1968—AUSTRALIAN CURRENCY—*continued*

($'000)

	30 June—				
	1964	*1965*	*1966*	*1967*	*1968*
ANNUAL INTEREST PAYABLE					
For Commonwealth purposes	118,280	119,498	122,087	129,159	144,319
On account of States—					
New South Wales	101,280	110,250	119,668	128,128	134,301
Victoria	70,890	77,650	85,023	91,936	98,070
Queensland	36,920	40,492	44,493	48,904	51,970
South Australia	38,114	41,534	45,350	48,797	51,889
Western Australia	28,284	30,886	33,617	36,217	38,165
Tasmania	19,790	21,706	23,987	25,941	27,776
Total, States	*295,278*	*322,515*	*352,138*	*379,921*	*402,178*
Total, Commonwealth and States	**413,558**	**442,014**	**474,225**	**509,080**	**546,497**

Government securities on issue at each rate of interest and according to earliest and latest years of maturity

For details of securities on issue for Commonwealth and State purposes at 30 June 1968 at each rate of interest and classified according to the earliest and latest years of maturity *see* the annual bulletin *State, Territory and Local Government Authorities' Finance and Government Securities.*

Short-term securities on issue

Particulars of the short-term securities (Treasury bills, Treasury notes and seasonal securities) of the Commonwealth and States in Australia at intervals from 30 June 1963 to 30 June 1967 are shown on page 814 of Year Book No. 53, and particulars at earlier dates are shown in previous issues. These securities are included in the government securities on issue as shown elsewhere. No short-term securities have been raised overseas since September 1956, when all such securities held in London were expatriated to Australia.

The Treasury bill discount rate in Australia has remained at 1 per cent since 29 July 1952.

In 1962–63, daily issues of Treasury notes replaced those of seasonal securities which had, during the three previous financial years, all matured in the course of the same financial year in which they were issued. Treasury notes with a currency of thirteen weeks were issued in multiples of $2,000 of the minimum subscription of $10,000. In 1967–68 the issue prices of Treasury notes were 99.95 per cent from 1 July to 13 July, 98.95 per cent from 14 July to 23 November, 98.89 per cent from 24 November to 7 March and 98.91 per cent from 8 March to 30 June and yields varied accordingly from 4.256 per cent to 4.502 per cent.

Government securities on issue on account of the States; local government and semi-governmental authority securities on issue

In some States certain public utilities, such as tramways, water supply and sewerage, harbour services, etc., are controlled by boards or trusts, which, in addition to receiving advances from the central government, raise loans by borrowing on their own behalf, while in other States these services are controlled by the central government. Direct comparisons between States of the securities on issue on account of the several States should therefore be made with caution. The table following shows for 1962–63 to 1966–67 particulars of the securities on issue on account of the States, the securities on issue by local government and semi-governmental authorities, and the aggregates of these.

GOVERNMENT SECURITIES ON ISSUE ON ACCOUNT OF THE STATES; LOCAL GOVERNMENT AND SEMI-GOVERNMENTAL AUTHORITY SECURITIES ON ISSUE, 30 JUNE 1963 TO 1967

	State	*Local government (a)*	*Semi-governmental(a)*	*Total*
SECURITIES ON ISSUE ($A'000)(*b*)				
30 June 1967—				
New South Wales	2,666,905	576,864	619,480	3,863,249
Victoria	1,893,069	182,465	1,490,357	3,565,891
Queensland	1,038,902	320,099	292,153	1,651,154
South Australia	1,027,080	36,350	137,512	1,200,942
Western Australia	772,511	52,873	91,597	916,981
Tasmania	535,606	51,976	56,381	643,963
Total, 30 June 1967	**7,934,074**	**1,220,627**	**2,687,480**	**11,842,181**
1966	7,494,623	1,121,852	2,482,096	11,098,571
1965	7,090,533	1,035,864	2,312,824	10,439,222
1964	6,690,562	953,191	2,141,239	9,784,992
1963	6,313,596	872,215	1,965,821	9,151,632
PER HEAD OF POPULATION ($A)(*b*)				
30 June 1967—				
New South Wales	619.22	133.94	143.83	896.99
Victoria	578.14	55.72	455.15	1,089.02
Queensland	610.54	188.12	171.69	970.35
South Australia	924.05	32.70	123.72	1,080.47
Western Australia	881.46	60.33	104.52	1,046.30
Tasmania	1,422.97	138.09	149.79	1,710.85
Total, 30 June 1967	**681.20**	**104.80**	**230.74**	**1,016.74**
1966	654.73	98.00	216.84	969.57
1965	630.53	92.12	205.67	928.32
1964	606.31	86.38	194.04	886.74
1963	583.05	80.55	181.54	845.14

(*a*) Excludes amounts due to the central government. Includes bank overdrafts. (*b*) Overseas holdings have been converted to Australian currency at the rates of exchange current at 30 June of each year shown.

NOTE. The considerable changes in the figures for local government and semi-governmental debt in the table above when compared with figures in Official Year Book prior to issue No. 54 are due to the transfer of New South Wales County Councils from the semi-governmental division to that of local government authorities (*see* page 782).

Commonwealth loan raisings

Under the Financial Agreement between the Commonwealth and the States the Commonwealth is responsible for raising all loan moneys required either by the Commonwealth or by the State Governments. Details of loan transactions given in this section relate, therefore, to all loans raised for the Commonwealth and the States.

New loans raised

Australia. The following table shows details of new loans raised in Australia by the Commonwealth during the three years 1965–66 to 1967–68.

COMMONWEALTH NEW LOANS(*a*) RAISED IN AUSTRALIA, 1965-66 TO 1967-68

						Allocation of loan		
						Commonwealth		
Month of raising	*Amount invited*	*Amount subscribed*	*Rate of interest per annum*	*Year of maturity ended June*	*Price of issue*	*War (1939–45), etc.*	*Other purposes*	*States*
	$'000	$'000	Per cent		Per cent	$'000	$'000	$'000
1965–66—								
August (Loan No. 156)	70,000	39,307	5	1968	100	..	16,490	78,893
		17,404	5	1975	99			
		38,671	5.25	1985	100			
November (Loan No. 158)	100,000	42,138	5	1968	100	..	85,995	46,796
		27,325	5	1976	99			
		63,327	5.25	1988	100			
February (Loan No. 160)	100,000	85,140	5	1969	100	..	30,118	144,092
		10,969	5	1976	99			
		78,101	5.25	1988	100			
May (Loan No. 161)	75,000	24,464	5	1970	100	..	11,999	50,076
		7,933	5	1976	99			
		29,677	5.25	1988	100			
June (Loan No. 163)(*b*)	169,000	72,000	5	1970	100	..	40,544	128,456
		24,000	5	1976	99			
		73,000	5.25	1988	100			
July–June	..	25,266	4.50–5.25	1974	100	5,068	3,758	16,440
1966–67—								
July (Loan No. 164)	80,000	35,066	5	1970	100	..	46,950	40,826
		13,531	5	1976	98.75			
		15,111	5.25	1989	100			
		24,068	5.25	2002	100			
October (Loan No. 166)	120,000	106,475	5	1970	100	..	58,679	134,971
		32,868	5	1977	98.8			
		18,168	5.25	1989	100			
		36,139	5.25	2002	100			
February (Loan No. 168)	(*c*)	38,868	4.5	1970	99.75	..	8,006	195,882
		46,209	5	1977	100			
		43,858	5.25	1989	100			
		74,953	5.25	2002	100			
May (Loan No. 170)	(*c*)	6,270	4.5	1970	99.75	..	31,009	37,735
		7,754	5	1977	100			
		22,217	5.25	1989	100			
		32,503	5.25	2002	100			
June (Loan No. 172)(*b*)	(*c*)	31,000	4.5	1970	99.75	..	9,984	80,016
		17,000	5	1977	100			
		16,000	5.25	1989	100			
		26,000	5.25	2002	100			
July–June	..	29,638	4.5–5.25	1974	100	7,127	5,987	16,524
1967–68—								
July (Loan No. 173)	(*c*)	8,644	4.5	1971	99.65	..	..	129,354
		28,857	5	1978	100			
		43,188	5.25	1990	100			
		48,665	5.25	2004	100			
October (Loan No. 174)	(*c*)	12,577	4.5	1971	99.75	..	..	146,624
		54,750	5	1978	100			
		41,782	5.25	1990	100			
		37,516	5.25	2004	100			
February (Loan No. 176)	(*c*)	51,612	4.8	1971	99.75	..	70,170	54,931
		20,933	5	1978	99.2			
		22,567	5.25	1990	100			
		29,989	5.25	2004	100			
May (Loan No. 178)	(*c*)	20,791	4.8	1971	99.8	..	50,095	41,204
		15,829	5	1978	99.2			
		27,510	5.25	1990	100			
		27,169	5.25	2004	100			
June (Loan No. (180)(*b*)	(*c*)	37,000	4.8	1971	99.8	..	44,041	148,959
		47,000	5	1978	99.2			
		54,000	5.25	1990	100			
		55,000	5.25	2004	100			
July–June	..	24,287	4.4–5.25	1976	100	6,181	2,104	16,002

(*a*) Includes loans raised for redemption of Treasury bills, but excludes conversion loans, loans for redemption of debt maturing in London, short-term debt and certain miscellaneous debt (*see* page 759). (*b*) Special issue. For details *see* following paragraph. (*c*) As from February 1967 the practice of specifying the amount invited for each loan was discontinued.

The loan of $193,000,000 raised in June 1968 (Loan No. 180) was for the purpose of fulfilling an undertaking given by the Commonwealth that the States would have access to loan funds for their works programmes up to the approved Loan Council borrowing programmes. These programmes totalled $580,000,000 in 1964–65, $605,000,000 in 1965–66, $645,000,000 in 1966–67 and $677,000,000 in 1967–68. The subscription to the special loan in 1967–68 came from the Loan Consolidation and Investment Reserve Trust Account. Loan No. 163 of June 1966 and Loan No. 172 of June 1967 were for the same purpose.

Finance for the approved Loan Council programmes from 1964–65 to 1967–68 was provided from the following sources:

	1964–65	*1965–66*	*1966–67*	*1967–68*
	$'000	$'000	$'000	$'000
Public loans, domestic raisings, etc.	424,092	413,871	501,133	407,655
Overseas loans and special Commonwealth assistance . . .	155,908	191,129	143,867	269,345
Total	**580,000**	**605,000**	**645,000**	**677,000**

In addition to the new loans raised as shown in the table on the previous page and the redemption and conversion loans shown on page 758 there were other miscellaneous loan operations in Australia (*see* page 759).

London. A loan of £Stg 14,000,000, 7 per cent interest, price of issue 99 per cent, maturing 1982 was raised in 1967–68.

New York. The following table gives details of the loans raised during the period 1965–66 to 1967–68.

COMMONWEALTH NEW LOANS REPAYABLE IN UNITED STATES DOLLARS, 1965-66 TO 1967-68

Month of raising	*Amount of loan*	*Rate of interest per annum*	*Price of issue*	*Year of maturity ended June*	*Allocation of loan*	
					Commonwealth	*States*
	$US'000	Per cent	Per cent		$US'000	$US'000
1965–66—						
November(*c*) . .	25,000	5.75	99.75	1986	5,000	20,000
July–June . .	5,000	4.5–5.25	100	1973	(*a*)5,000	. .
July–June . .	18,850	4.5–5.25	100	1974	(*a*)18,850	. .
July–June . .	4,250	5–5.75	100	1975	(*a*)4,250	. .
July–June . .	5,400	4.5–5.25	100	1974	(*b*)5,400	. .
July–June . .	250	5–5.75	100	1974	(*b*)250	. .
1966–67—						
December(*c*) . .	25,000	6.5	97.5	1977	25,000	. .
June(*c*) . . .	25,000	6.5	97.5	1982	25,000	. .
July–June . .	18,250	5–5.75	100	1975	(*a*)18,250	. .
July–June . .	16,000	5–5.75	100	1975	(*b*)16,000	. .
July–June . .	4,742	4	100	1972	(*d*)4,742	. .
July–June . .	5,274	5.5	100	1972	(*d*)5,274	. .
July–June . .	90,972	4.75	100	1974	(*d*)90,972	. .
1967–68—						
October(*c*) . .	25,000	6.875	100	1983	25,000	. .
July–June . .	13,500	5–5.75	100	1975	(*a*)13,500	. .
July–June . .	1,750	5–5.75	100	1975	(*b*)1,750	. .
July–June . .	4,302	5.5	100	1977	(*b*)4,302	. .
July–June . .	50,970	6–7	100	1975	(*a*)50,970	. .
July–June . .	31,526	4	100	1973	(*d*)31,526	. .
July–June . .	108,369	4.75	100	1975	(*d*)108,369	. .
July–June . .	8,341	5.5	100	1973	(*d*)8,341	. .

(*a*) Proceeds used for Qantas Empire Airways Loan. (*b*) Proceeds used for Australian National Airlines Commission Loan. (*c*) Prospectus issued in New York and loan offered for subscription in the United States, United Kingdom and the various European centres. (*d*) Proceeds used for defence purposes.

Conversion and redemption loans

Australia. Particulars of conversion loans raised in Australia during the three years 1965–66 to 1967–68 are given in the following table.

COMMONWEALTH CONVERSION AND REDEMPTION LOANS RAISED IN AUSTRALIA, 1965-66 TO 1967-68

Month of raising	Old loan		New loan				Increase in annual liability for interest
	Amount	Rate of interest per annum	Amount	Rate of interest per annum	Price of issue	Year of maturity ended June	
	$A'000	Per cent	$A'000	Per cent	Per cent		$A'000
1965–66—							
August	158,700	4.25	78,998	5	100	1968	−354
			24,626	5	99	1975	
			22,779	5.25	100	1985	
			(a)304	4.5–5.25	100	1973	
November	95,391 132,238	3.13 4.5	73,832	5	100	1968	3,562
			70,144	5	99	1976	
			89,598	5.25	100	1988	
			(a)13,152	4.5–5.25	100	1973	
May	199,573 129,287	4. 4.25	123,956	5	100	1970	1,761
			74,477	5	99	1976	
			100,748	5.25	100	1988	
			(a)627	4.5–5.25	100	1973	
July–June (special bonds)	87,759	4.5–5.25	87,759	4.5–5.25	100	1974	..
1966–67—							
July	140,272	3.75	44,146	5	100	1970	145
			30,904	5	98.75	1976	
			21,297	5.25	100	1989	
			10,001	5.25	100	2002	
			(a)187	4.5–5.25	100	1974	
October	9,169 140,481	4.25 4.5	56,725	5	100	1970	−1,241
			30,412	5	98.8	1977	
			18,565	5.25	100	1989	
			239	5.25	100	2002	
			(a)2,805	4.5–5.25	100	1974	
February	105,091 98,762 61,902	3.75 4.75 5	101,158	4.5	99.75	1970	−2,029
			59,955	5	100	1977	
			25,354	5.25	100	1989	
			10,431	5.25	100	2002	
			(a)5,084	4.5–5.25	100	1974	
May	160,359	4.25	68,021	4.5	99.75	1970	−1,249
			36,494	5	100	1977	
			11,138	5.25	100	1989	
			9	5.25	100	2002	
			(a)2,111	4.5–5.25	100	1974	
July–June (special bonds)	83,231	4.5–5.25	83,231	4.5–5.25	100	1974	..
1967–68—							
July	32,000	3	32,000	5.25	100	1989	739
October	272,472	4.5	105,587	4.5	99.75	1971	−1,382
			74,847	5	100	1978	
			26,685	5.25	100	1990	
			13,046	5.25	100	2004	
			(a) 5,749	4.4–5.2	100	1975	
February	98,164 142,505	4.75 5	72,653	4.8	99.75	1971	−4,266
			40,294	5	99.2	1978	
			29,347	5.25	100	1990	
			5,074	5.25	100	2004	
			(a) 4,094	4.6–5.2	100	1976	
May	259,259	5	91,140	4.8	99.8	1971	−4,350
			40,532	5	99.2	1978	
			33,222	5.25	100	1990	
			4,021	5.25	100	2004	
			(a) 4,925	4.6–5.2	100	1976	
July–June (special bonds)	90,550	4.4–5.25	90,550	4.4–5.25	100	1976	..

(a) Special bonds.

Minus sign (—) indicates reduction in liability for interest.

New York. Between May 1965 and June 1967 five loans each of $US25,000,000 were raised, mainly in Europe.

Credit arrangements for defence purchases in the United States of America

The *Loan (Defence) Act* 1966 authorises arrangements for the financing on extended payment terms of purchases of defence equipment in the United States. Drawings of $US100,989,000 were made under these arrangements in 1966–67 and of $US148,236,000 in 1967–68.

International Bank for Reconstruction and Development loans

Drawings from International Bank loans have been made mainly in United States dollars but partly in Canadian dollars, Swiss francs and Deutsche marks. The amount outstanding 30 June 1968 was $US194,863,000.

Swiss loans

At the 30 June 1968 an amount of 290,000,000 Swiss francs was outstanding on the five Swiss loans. The fifth loan of 50,000,000 Swiss francs was raised in April 1967 at the rate of 5.5 per cent maturing in 1982.

Canadian loans

During 1967–68 an amount of $Can2,050,000 was raised at par for the Australian National Airlines Commission with an interest rate of 6 to 6.75 per cent maturing in 1974.

Netherlands loan

No loans have been raised in the Netherlands since 1961.

German loan

In October 1967 an amount of D.M.100,000,000 was raised at 99 per cent with an interest rate of 6.5 per cent maturing in 1982.

Summary of loan transactions

The following table contains a summary of loan transactions on behalf of the Commonwealth and State Governments during the five years 1963–64 to 1967–68.

COMMONWEALTH LOAN TRANSACTIONS: SUMMARY, 1963–64 TO 1967–68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
New loans(*a*) raised in—						
Australia	$A'000	582,238	600,120	658,725	673,696	709,665
London	$Stg'000	21,067	. .	. .	. .	14,000
New York(*b*)	$US'000	32,768	87,269	75,807	185,794	243,759
Switzerland	Francs'000	. .	. .	. .	50,000	. .
Germany	DM'000	. .	. .	. .	. .	100,000
Miscellaneous debt in Australia(*c*)	$A'000	−54	24,184	6,350	29,271	18,880
Net change in short-term debt—						
Australia—Public	$'A000	−68,000	−62,000	−36,000	10,000	51,000
Internal	$A'000	39,400	33,400	49,100	−2,000	5,500
Treasury notes	$A'000	13,494	−72,138	35,564	−27,544	185,283
Loans raised for conversion or redemption of existing securities maturing in—						
Australia	$A'000	455,820	540,645	761,000	618,268	673,766
London	$Stg'000	5,741	. .	. .	. .	. .

(*a*) Includes loans raised for redemption of Treasury bills. (*b*) Includes proceeds of, $US27,018,000, $US23,519,000, $US17,057,000 and $US555,000 in 1963–64, 1964–65, 1965–66 and 1966–67 from International Bank for Reconstruction and Development loan used for the purposes of the Snowy Mountains Hydro-electric Authority. (*c*) Advance loan subscriptions (net change), 'over the counter sales' (instalment stock and inscribed stock and bonds issued by State Governments), and Peace Savings Certificates (interest credited).

Minus sign (−) denotes a decrease in debt.

Government securities on issue maturing in Australia, classified by holder

The following table shows details of government securities maturing in Australia classified according to holder as at 30 June 1967 and 1968.

GOVERNMENT SECURITIES ON ISSUE: COMMONWEALTH AND STATE MATURING IN AUSTRALIA, BY HOLDER(*a*), 30 JUNE 1967 AND 1968

(*Source:* Reserve Bank of Australia *Statistical Bulletin*)

	30 June—			
	1967		*1968*	
Holder	*Amount*	*Proportion of total*	*Amount*	*Proportion of total*
	$ million	Per cent	$ million	Per cent
Reserve Bank of Australia	815	8.4	1,041	10.1
Trading banks	1,200	12.4	1,193	11.5
Savings banks	2,178	22.5	2,250	21.7
Other Banking Institutions	4	. .	6	0.1
Life insurance offices	978	10.1	1,087	10.5
Fire, marine and general insurance offices	118	1.2	130	1.3
Other private financial institutions—				
Pension and provident funds	155	1.6	174	1.7
Friendly societies, hospitals and medical funds	20	0.2	25	0.2
Trustee companies	123	1.3	122	1.2
Pastoral finance companies	26	0.3	35	0.3
Money market dealers	464	4.8	494	4.8
Miscellaneous	47	0.5	80	0.8
Government financial institutions—				
Insurance offices and funds	113	1.2	121	1.2
Pension and provident funds	176	1.8	173	1.7
Public trustees	31	0.3	28	0.3
All other(*b*)	2	. .	4	. .
Public authorities (excluding finance)—				
Commonwealth Government (including Commonwealth semi-governmental)	1,640	16.9	1,789	17.3
State Government	26	0.3	58	0.6
Local government and State semi-governmental	231	2.4	245	2.4
Companies (excluding finance)	188	1.9	145	1.4
Other holders—				
Marketing boards	4	. .	6	0.1
Farmers	97	1.0	87	0.8
Non-profit organisations	51	0.5	52	0.5
All other	991	10.2	1,013	9.8
Total	**9,677**	**100.0**	**10,358**	**100.0**

(*a*) Total stock inscribed, bonds in circulation, amounts paid up on outstanding applications, in transit claims and advance applications, Commonwealth Treasury Bills and Treasury Notes, debentures, and Savings Certificates. (*b*) Includes securities held by Commonwealth Development Bank of Australia.

National Debt Sinking Fund

Securities on issue on behalf of the Commonwealth

The National Debt Sinking Fund was established by the *National Debt Sinking Fund Act* 1923–1950 and came into operation on 11 August 1923. Particulars of the creation and operation of sinking funds by that Act are included in issues of the Year Book prior to No. 23. The *National Debt Sinking Fund Act* 1966 repealed all previous legislation on sinking funds relating to securities on issue on behalf of the Commonwealth. Under the Act of 1966 the period of redemption is 25 years from 1 July 1966 for debt outstanding at 30 June 1966 and 25 years for net debt created in subsequent years.

Broadly, the amounts payable to the National Debt Sinking Fund each year are made up of contributions from the Consolidated Revenue Fund of the Commonwealth as follows:

(*a*) an amount of $30.94m each year for a period of 25 years;

(*b*) an amount equal to 4 per cent of the amount of net debt created (if any) in any year for a period of 25 years.

In addition, an amount equal to specified receipts by the Commonwealth in repayment of loans or advances made out of moneys in the Loan Fund will be paid to the Sinking Fund.

The amounts payable to the Fund in any year from Consolidated Revenue Fund are to be reduced by the following:

(*a*) the net income from investments in any year; and

(*b*) an amount equal to 4 per cent of the amount of the net reduction of debt in any year.

Particulars of receipts and expenditure of the Commonwealth Account for the years 1963–64 to 1967–68 are as follows.

NATIONAL DEBT SINKING FUND: COMMONWEALTH ACCOUNT, 1963–64 TO 1967–68

($'000)

	1963–64	*1964–65*	*1965–66(a)*	*1966–67*	*1967–68*
Receipts—					
From Consolidated Revenue	57,739	62,171	64,969	21,589	25,421
Loans and advances repaid	8,806	10,318	11,659	12,684	13,77
War Service Homes money repaid	27,131	31,137	31,045	(*a*)	(*a*)
Reparation moneys	..	..	221	..	..
Interest on investments(*b*)	12,872	12,040	11,910	9,351	7,665
Total, receipts	*106,547*	*115,666*	*119,804*	*43,624*	*46,859*
Expenditure (net cost)—					
Securities repurchased and redeemed in—					
Australia	49,311	153,857	81,869	112,435	68,019
London	1,507	7,239	6,565	9,905	5,983
New York	20,334	22,301	26,166	29,852	26,145
Canada	97	69	151	131	122
Netherlands	..	..	..	..	118
Total, expenditure	*71,249*	*183,466*	*114,751*	*152,324*	*100,386*
Balance at 30 June	365,562	297,761	302,814	194,114	140,587
Face value of securities repurchased and redeemed in—					
Australia	48,881	153,823	82,258	112,784	68,287
London	1,268	6,279	5,711	10,340	6,043
New York	9,330	10,204	12,026	29,875	26,569
Canada	48	34	75	134	135
Netherlands	..	..	..	..	118
Total, face value	*59,526*	*170,340*	*100,070*	*153,133*	*101,151*

(*a*) In the years 1966–67 and 1967–68 principal repayments were credited to Consolidated Revenue Fund. (*b*) Includes instalment repayments of loans from International Bank for Reconstruction and Development: 1963–64—face value, $8.0m, net cost, $17.4m; 1964–65—face value, $8.4m, net cost, $18.3m; 1965–66—face value, $8.7m, net cost, $19.1m; 1966–67—face value, $19.9m, net cost, $20.0m; 1967–68—face value, $20.1m, net cost, $20.2m.

Securities on issue on behalf of States

A sinking fund for the redemption of the securities on issue on behalf of States was established under the Financial Agreement. Particulars of the transactions of the National Debt Sinking Fund (States' Account) for each State during the year 1967–68 and for all States during the years 1963–64 to 1967–68 are shown in the following tables.

NATIONAL DEBT SINKING FUND: STATES' ACCOUNT, 1967–68
($'000)

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
Receipts—							
Contributions under Financial Agreement—							
Commonwealth	6,826	4,885	2,619	2,673	1,986	1,398	20,387
States	24,199	18,595	9,241	9,445	7,842	4,162	73,486
Interest from States on cancelled securities	32	18	18	9	11	5	93
Special contributions by States	63	25	30	20	6	..	143
Interest on investments, etc.	22	5	−1	9	6	7	48
Total, receipts	*31,142*	*23,528*	*11,907*	*12,156*	*9,851*	*5,573*	*94,157*
Expenditure (net cost)—							
Securities repurchased and redeemed in—							
Australia	11,021	18,652	8,572	4,332	7,403	588	50,568
London	15,090	2,783	1,558	6,679	1,283	4,423	31,815
New York	4,434	2,410	1,613	1,271	860	743	11,330
Canada	200	160	80	85	60	46	631
Netherlands	172	138	70	69	54	40	543
Total, expenditure	*30,916*	*24,142*	*11,893*	*12,436*	*9,659*	*5,839*	*94,886*
Balance at 30 June 1968	1,262	46	437	207	408	82	2,440
Face value of securities repurchased and redeemed in—							
Australia	11,030	18,660	8,572	4,333	7,403	588	50,586
London(*a*)	13,837	2,442	1,360	6,111	1,139	4,065	28,953
New York(*a*)	2,205	1,196	801	631	425	371	5,629
Canada(*a*)	110	88	44	47	33	25	348
Netherlands(*a*)	362	114	92	47	36	27	677
Total, face value	*27,543*	*22,500*	*10,869*	*11,169*	*9,036*	*5,076*	*86,193*

(*a*) Converted in accordance with the Financial Agreement at the equivalent of the mint par of exchange prevailing on 1 July 1927.

NATIONAL DEBT SINKING FUND: STATES' ACCOUNT, 1963–64 TO 1967–68
($'000)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Receipts—					
Contributions under Financial Agreement—					
Commonwealth	15,691	16,646	17,761	18,951	20,387
States	55,669	60,099	64,385	68,867	73,486
Interest from States on cancelled securities	45	26	106	113	93
Special contributions by States	974	222	222	220	143
Interest on investments, etc.	107	−36	30	−46	48
Total, receipts	*72,486*	*76,958*	*82,503*	*88,105*	*94,157*
Expenditure (net cost)—					
Securities repurchased and redeemed in—					
Australia	60,791	52,808	60,861	59,451	50,568
London	4,075	14,612	11,685	16,545	31,815
New York	6,228	9,948	11,775	10,441	11,330
Canada	501	358	782	680	631
Netherlands	..	..	..	..	543
Total, expenditure	*71,594*	*77,726*	*85,104*	*87,118*	*94,886*
Balance at 30 June	5,552	4,783	2,182	3,169	2,440
Face values of securities repurchased and redeemed in—					
Australia	60,806	52,825	60,888	59,496	50,586
London(*a*)	3,520	12,250	10,002	13,579	28,953
New York(*a*)	2,862	4,554	5,455	4,925	5,629
Canada(*a*)	248	178	388	344	348
Netherlands(*a*)	..	..	..	..	677
Total, face value	*67,435*	*69,807*	*76,733*	*78,345*	*86,193*

(*a*) Converted in accordance with the Financial Agreement at the equivalent of the mint par of exchange prevailing on 1 July 1927.

TAXES ON INCOME

A description of the development of income taxes in Australia appeared in Year Book No. 35, page 926. Since July 1942 the Commonwealth, under the uniform tax arrangement, has been the only authority imposing taxes on income.

The laws dealing with the assessment and imposition of Income tax at 30 June 1968 were—*Income Tax Assessment Act* 1936–1968, *Income Tax Act* 1967, *Income Tax* (*Partnerships and Trusts*) *Act* 1967, *Income Tax* (*Non-Resident Dividends*) *Act* 1967, and the Income Tax Regulations. The second-mentioned Act is an annual measure, and its primary purpose is to declare the rates of tax payable for the financial year.

Both individuals and companies are liable for income tax. Private companies are subject to tax on undistributed income in addition to the primary income tax levied on all companies.

The operation of the *Income Tax Assessment Act* 1936–1968 is affected by the following Acts:

(*a*) *Taxation Administration Act* 1953–1966, which provides for the administration of certain Acts relating to taxation;

(*b*) *Income Tax* (*International Agreements*) *Act* 1954–1968 which gives the force of law to agreements between the Commonwealth and the Governments of the United Kingdom, Canada and New Zealand, and to a convention between the Government of the Commonwealth and the United States of America, for the avoidance of double taxation and the prevention of evasion of taxes on income.

(*c*) *Diplomatic Privileges and Immunities Act* 1967 which provides for the exemption from Income Tax of certain income of diplomatic representatives, their staff and families.

Lodgment of returns and assessment of income tax

Individuals and non-profit companies with total income in excess of $416 and all partnerships, trusts and companies deriving income are required to lodge returns of income by 31 July each year (31 August for business incomes). The income tax payable is assessed, and assessment notices showing the amounts payable are issued, during the year following the year of income. In respect of individuals the approximate amount payable, however, has already been collected during the income year from employees by deductions from wages and from non-employees by a provisional tax. The amount shown on the assessment notice is therefore adjusted against the amount already paid and any difference either collected or refunded. No such system of 'pay-as-you-earn' is in operation in respect of companies.

Pay-as-you-earn system

Salary and wage earners are subject to instalment deductions by employers for payment of the tax in accordance with a prescribed scale which shows the amount to be deducted according to income and number of dependants. Under the group scheme of deduction, covering most employers of more than ten persons, the amount deducted is required to be remitted to the Taxation Department within seven days of the close of the month in which the deduction is made.

Not later than 14 July each year employers are required to supply each employee with a group certificate showing amount earned and total deductions during the year ended 30 June. This certificate, together with the employee's return of income, is forwarded to the Taxation Department. If the tax assessed on the basis of the return is less than the amount shown on the group certificate, a refund is forwarded with the assessment, if not, the employee is required to pay the balance.

Under the stamp scheme used by employers other than group employers a stamp deduction sheet in two parts is used. Each four weeks the employer purchases stamps (also in two parts) for the amount of deductions made each pay day and sticks one part on each half of the sheet. At the end of the year the employer gives the employee one half of the sheet and sends the other half to the Taxation Department. The employee's half is then used in the same way as a group certificate.

Taxpayers with income other than salary or wages pay provisional tax in respect of that income. Collection of tax for the current year is made at the same time as collection and assessment for the previous year are adjusted. The notice of assessment shows an amount of provisional tax for the current year. The provisional amount is an approximation to the tax which will be payable after the return of income for the current year has been lodged. It is ascertained by assuming that the income of the current year will be the same as that for the previous year (for which a return has already been lodged), but the rates for the current year are applied to the income and not the rates for the year in which it was derived. The assessment notice shows the provisional tax paid in the previous year as a credit against the tax assessed on the basis of the return for that year. On receipt of his assessment, the taxpayer may elect to substitute his own estimate of income for the current year and pay tax on basis of this estimate. To protect the revenue, a penalty is imposed if the taxpayer elects to pay provisional tax on an estimate of income more than twenty per cent lower than the income of the previous year and he underestimates his income by more than twenty per cent. An employee with income of $300 or more from sources other than salaries or wages is required to pay provisional tax in respect of that income.

Tax collected. During the collection years 1963–64 to 1967–68 net receipts (i.e. tax collected *less* refunds to taxpayers) from individual taxpayers were $1,272m; $1,570m; $1,731m; $1,923m and $2,177m respectively. Of these amounts, instalments from salaries and wages in the respective years accounted for $792m (62.3 per cent), $991m (63.8 per cent), $1,160m (67.0 per cent), $1,324m (68.8 per cent) and $1,508m (69.2 per cent). The remainder came from direct cash payments from individual taxpayers.

Assessable income

As a general principle income assessable to income tax includes all income other than exempt income derived directly or indirectly from sources in Australia. Thus a non-resident is taxed on income derived in Australia, while a resident, in general, is not taxed on income (other than dividends) derived from overseas if the income is taxed in the country in which it is derived.

The word income is used in its ordinary sense and includes certain other receipts declared by the Assessment Act to be assessable income. Receipts such as gifts (other than gratuities received by an employee from his employer in the course of his employment), legacies, profits from the sale of property (not acquired for the purpose of profit making by sale), lottery wins, and most capital gains are not regarded as income and are not assessable.

Certain types of Australian income are exempt from tax in Australia, the more important being (i) war and service pensions, (ii) age and invalid pensions, child endowment and other payments under the *Social Services Act* 1947–1967 and the *Tuberculosis Act* 1948, (iii) income from gold-mining and some other mining operations, (iv) twenty per cent of certain mining profits, (v) dividends paid out of exempt mining profits, (vi) income received from a scholarship, bursary or other educational allowance, (vii) income of certain non-profit institutions and mutual income of some other organisations, and (viii) income of specified superannuation funds. No amount is included in assessable income on account of a house occupied by its owner.

The pay and allowances and bounties for part-time duty, and the gratuity payable on a call out for continuous full-time service of members of each service of the Defence Force Emergency Reserves is exempt from income tax. This exemption does not apply to pay and allowances for continuous full-time service in Australia. Also the pay and allowances earned by members of the Defence Force for service outside Australia while allotted for duty in special areas (i.e. part of Borneo and adjacent waters, and South Vietnam) are exempt from income tax.

Expenditure incurred in gaining or producing assessable income or necessarily incurred in carrying on a business for that purpose is an allowable deduction, except to the extent that such expenditure is of a capital, private, or domestic nature, or is incurred in gaining or producing exempt income. Certain subscriptions to business associations and trade union dues are also allowable deductions.

Special deductions for both resident and non-resident taxpayers include such items as trading losses incurred in previous years, bad debts, depreciation, annual rates and land taxes, gifts to various institutions (e.g. scientific, charitable, benevolent, etc.), and, subject to certain conditions, one-third of amounts paid as calls to mining, prospecting, oil-prospecting, or afforestation companies operating in Australia. In lieu of the one-third deduction for calls, capital subscribed to companies engaged in exploration or mining for petroleum and certain other minerals in Australia or Papua and New Guinea may, in certain circumstances, be deductable in full.

Special deductions may be allowed for certain expenditure of a capital nature incurred in mining or prospecting operations conducted for the purpose of earning assessable income and in the provision of certain transport facilities necessary for and directly related to those operations. In the case of primary producers certain developmental expenditure of a capital nature may be deducted. Deductions in addition to depreciation are allowed to manufacturers and primary producers by way of an investment allowance for expenditure on specified plant and equipment. Subject to a maximum permissible tax saving, a double deduction is effectively allowed for certain expenditure incurred, before 1 July 1968, in export market development. Under new provisions, subject to a maximum permissible tax saving, the second deduction will be replaced by a rebate of tax in respect of such expenditure incurred after 30 June 1968.

Zone allowance deductions are prescribed for residents of isolated areas subject to uncongenial climatic conditions and high costs of living. Two zones, A and B, have been prescribed and the allowances are: Zone A, $540 plus an amount equal to half the total deductions allowable for the maintenance of dependants; and Zone B, $90 plus an amount equal to one-twelfth of the total deductions allowable for the maintenance of dependants. Members of the defence forces serving in certain overseas localities, other than those declared to be special areas (*see* top of page), for more than half the year of income are also entitled to a deduction of the same amount as residents of Zone A.

Income tax is levied on the taxable income remaining after making these deductions and the concessional deductions to which reference is made in the following paragraphs.

Concessional deductions

Concessional allowances to residents for dependants, medical and dental expenses, life insurance and superannuation contributions, etc. are made by way of a deduction from income. The maximum deduction allowed for the income year 1968–69 for each dependant or for a housekeeper is shown in the following table.

Dependant, etc. (resident)	*Maximum deduction(a)*
	$
Spouse	312
Daughter-housekeeper(*b*); housekeeper(*c*)	312
Parent or parent-in-law	312
One child under 16 years of age	208
Other children under 16 years of age	156
Invalid relative(*d*)	208
Child 16 to 21 years receiving full-time education	208

(*a*) If the dependant is maintained for part only of the year, a partial deduction is allowed. (*b*) Of a widower or widow. (*c*) Caring for a spouse in receipt of an invalid pension, or caring for children under 16 years of age of a widower or widow. (*d*) Child, step-child, brother or sister over 16 years of age.

When the dependant maintained derives separate income, the amount of the concessional deduction is reduced by the amount, if any, by which the separate net income exceeds $130. Separate net income includes age and invalid pensions but not child endowment. Scholarships are excluded except insofar as they relate to maintenance.

For the 1968–69 income year medical expenses (less amounts recouped from hospital and medical funds) paid by a taxpayer who is a resident, in respect of himself or dependants, including children under twenty-one years of age, are allowed as a concessional deduction. Medical expenses include payments made to a legally qualified medical practitioner, nurse or chemist, or to a hospital, in respect of an illness or operation, payments for dental services, payments for therapeutic treatment and eye tests, expenditure on medical or surgical appliances, artificial limbs or eyes, hearing aids and spectacles, the remuneration of an attendant of a person who is blind or confined to a bed or invalid chair, and payments for the maintenance of a trained dog used for the guidance of a blind person.

Other concessional deductions allowed to resident taxpayers include: (i) payments of life insurance premiums and contributions to superannuation funds and friendly societies, not exceeding an aggregate of $1,200, (ii) payments to medical or hospital benefits funds, (iii) funeral expenses of a dependant not exceeding $100, and (iv) expenditure incurred for the full-time education of children or dependants who are less than twenty-one years of age, with a maximum of $300 for each child or dependant.

Effective exemption from tax

For the income years up to 1962–63 a taxpayer without dependants was exempt from income tax if income did not exceed $208. From 1963–64 onwards the exemption was $416. The effect of the deductions for dependants was to exempt resident taxpayers up to the incomes shown in the examples hereunder.

RESIDENT TAXPAYERS: EFFECTIVE EXEMPTIONS FROM TAX
($)

	Taxpayer with—					
			Wife and—			
Income years ended June—	*No dependants*	*Wife only*	*one child*	*two children*	*three children*	*four children*
Up to 1963 . .	208	494	676	806	936	1,066
1964 to 1967 . .	416	702	884	1,014	1,144	1,274
1968 and 1969 . .	416	728	936	1,092	1,248	1,404

For the 1968–69 income year an aged person (i.e. a man who has attained the age of sixty-five years or a woman who has attained the age of sixty years and is a resident of Australia during the whole of the year of income) is exempt from income tax if taxable income does not exceed $1,248. If taxable income exceeds $1,248 but does not exceed $1,532 the tax cannot exceed nine-twentieths of the excess of taxable income over $1,248. An aged person who contributes to the maintenance of a spouse is exempt from tax if the combined taxable incomes do not exceed $2,184. Where the combined taxable incomes exceed $2,184 the tax payable by the taxpayer (provided his taxable income does not exceed $3,514) is limited to nine-twentieths of the excess of the combined taxable incomes over $2,184.

Rates of income tax on individuals

The table on page 767 shows the rates of income tax for income years 1953–54 to 1968–69 as set out in the first schedule to the Income Tax Act.

Assessable income represents total actual income minus exempt income. Taxable income is the amount remaining after all allowable deductions have been made on assessable income.

The minimum amount of income tax payable is 50c.

Where the taxable income of a person does not exceed $428 the amount of tax payable is limited to one half of the amount by which the taxable income exceeds $416.

The only cases in which incomes below $416 attract tax are those for which special rates are payable in accordance with the provisions of the *Income Tax (Partnerships and Trusts) Act* 1967.

For primary producers the rate of income tax for the current year is determined by the average of the taxable incomes for the five years up to and including the current year. In 1951 a taxpayer was given the right to elect not to have the averaging provisions applied to his assessment but up to

1965–66 income year the election, if made under then existing legislation, was irrevocable. The *Income Tax Assessment Act* 1966 amended this and a primary producer who elected to withdraw from the averaging system prior to the 1966–67 income year is now able to review that decision. He may return to the averaging system provided that he makes the necessary election in respect of any one of the income years 1966–67 to 1969–70. In the year of re-entry the taxpayer will be treated for averaging purposes as though he had never withdrawn from the system. However, he will not have the right to withdraw again. The application of the averaging provisions is limited to that part of the taxable income which does not exceed $16,000. When the taxable income does exceed $16,000, the balance is taxed at ordinary rates applicable to that part. When the taxable income is less than $16,000, the rate of tax for averaging purposes is limited to the rate on a taxable income of $16,000.

The taxable income, including any abnormal receipts, of actors, artists, composers, inventors, etc. is taxed at the rate appropriate to the normal taxable income plus one-third of the abnormal receipts.

Interest derived from bonds, debentures, stocks or other securities issued between 1 January 1940 and 31 October 1968 by the Commonwealth, together with interest on certain State semi-governmental loans issued free of State income tax, is subject to a rebate of 10 cents for each $1 of interest included in the taxable income. The rebate does not apply to interest received from bonds etc., issued on or after 1 November 1968.

INCOME TAX—INDIVIDUALS: GENERAL RATES, 1953–54 TO 1968–69 INCOME YEARS

Total taxable income		*1953–54*		*1954–55 to 1964–65(a)*		*1965–66 to 1968–69(b)*	
Column 1 *Exceeding*	*Column 2* *Not exceeding*	*Tax on amount in column 1*	*Tax on each $ of balance of income*	*Tax on amount in column 1*	*Tax on each $ of balance of income*	*Tax on amount in column 1*	*Tax on each $ of balance of income*
$	$	$	cents	$	cents	$	cents
Nil	200	Nil	0.42	Nil	0.42	Nil	0.40
200	300	0.83	1.67	0.83	1.25	0.80	1.20
300	400	2.50	3.75	2.08	2.92	2.00	2.90
400	500	6.25	5.42	5.00	4.58	4.90	4.50
500	600	11.67	7.08	9.58	6.25	9.40	6.10
600	800	18.75	9.17	15.83	8.33	15.50	8.20
800	1,000	37.08	11.67	32.50	10.83	31.90	10.80
1,000	1,200	60.42	13.75	54.17	12.50	53.50	12.50
1,200	1,400	87.92	15.83	79.17	14.17	78.50	14.20
1,400	1,600	119.58	17.50	107.50	15.83	106.90	15.90
1,600	1,800	154.58	19.17	139.17	17.50	138.70	17.60
1,800	2,000	192.92	20.83	174.17	19.17	173.90	19.30
2,000	2,400	234.58	23.33	212.50	21.67	212.50	21.60
2,400	2,800	327.92	26.67	299.17	24.58	298.90	24.60
2,800	3,200	434.58	29.58	397.50	27.08	397.30	27.10
3,200	3,600	552.92	32.50	505.83	29.58	505.70	29.60
3,600	4,000	682.92	35.42	624.17	32.08	624.10	32.10
4,000	4,800	824.58	38.75	752.50	35.42	752.50	35.40
4,800	5,600	1,134.58	41.67	1,035.83	38.33	1,035.70	38.30
5,600	6,400	1,467.92	44.58	1,342.50	41.25	1,342.10	41.20
6,400	7,200	1,824.58	47.50	1,672.50	43.75	1,671.70	43.80
7,200	8,000	2,204.58	50.42	2,022.50	46.25	2,022.10	46.30
8,000	8,800	2,607.92	53.33	2,392.50	48.75	2,392.50	48.70
8,800	10,000	3.034.58	56.67	2,782.50	51.67	2,782.10	51.70
10,000	12,000	3,714.58	60.00	3,402.50	55.00	3,402.50	55.00
12,000	16,000	4,914.58	62.92	4,502.50	57.92	4,502.50	57.90
16,000	20,000	7,431.25	65.83	6,819.17	60.42	6,818.50	60.40
20,000	32,000	10,064.58	68.75	9,235.83	63.33	9,234.50	63.30
32,000	upwards	18,314.58	70.00	16,835.83	66.67	16,830.50	66.70

(*a*) For the 1959–60, 1961–62, 1962–63, and 1963–64 income years a rebate of 5 per cent was allowable on the tax calculated from this schedule. (*b*) Additional tax equal to 2½ per cent of the tax calculated from this schedule was also payable for these financial years.

Taxes on specified incomes

The following table shows the income tax payable by taxpayers, with various incomes and numbers of dependants, on income derived in the years 1960–61 to 1968–69.

INCOME TAX ON SPECIFIED INCOMES, 1960-61 TO 1968-69 INCOME YEARS

($)

Income(a)$	*1960–61*	*1961–62 and 1962–63*	*1963–64*	*1964–65*	*1965–66 and 1966–67*	*1967–68 and 1968–69*
TAXPAYER WITH NO DEPENDANTS						
500 . . .	9.60	9.10	9.10	9.60	9.63	9.63
600 . . .	15.80	15.00	15.00	15.80	15.88	15.88
800 . . .	32.50	30.90	30.90	32.50	32.69	32.69
1,000 . . .	54.20	51.50	51.50	54.20	54.83	54.83
1,200 . . .	79.20	75.20	75.20	79.20	80.46	80.46
1,600 . . .	139.20	132.20	132.20	139.20	142.16	142.16
2,000 . . .	212.50	201.90	201.90	212.50	217.81	217.81
3,000 . . .	451.70	429.10	429.10	451.70	462.78	462.78
4,000 . . .	752.50	714.90	714.90	752.50	771.31	771.31
6,000 . . .	1,507.50	1,432.10	1,432.10	1,507.50	1,544.57	1,544.57
10,000 . . .	3,402.50	3,232.40	3,232.40	3,402.50	3,487.56	3,487.56
TAXPAYER WITH DEPENDENT WIFE						
500 . . .	1.00	1.00	. .	. .	. .	. .
600 . . .	2.50	2.40	. .	. .	. .	. .
800 . . .	10.50	10.00	10.00	10.50	10.50	9.07
1,000 . . .	25.30	24.00	24.00	25.30	25.45	23.27
1,200 . . .	44.80	42.60	42.60	44.80	45.31	42.43
1,600 . . .	95.30	90.50	90.50	95.30	97.04	93.25
2,000 . . .	159.10	151.10	151.10	159.10	162.72	158.02
3,000 . . .	376.40	357.60	357.60	376.40	385.53	378.97
4,000 . . .	660.70	627.70	627.70	660.70	677.20	668.60
6,000 . . .	1,389.50	1,320.00	1,320.00	1,389.50	1,423.78	1,412.80
10,000 . . .	3,254.70	3,092.00	3,092.00	3,254.70	3,335.99	3,322.21
TAXPAYER WITH DEPENDENT WIFE AND ONE CHILD						
500 . . .	. .	. .	. .	. .	. .	. .
600 . . .	. .	. .	. .	. .	. .	. .
800 . . .	3.00	2.90	. .	. .	. .	. .
1,000 . . .	11.60	11.00	11.00	11.60	11.63	8.71
1,200 . . .	26.80	25.50	25.50	26.80	26.97	22.61
1,600 . . .	70.70	67.20	67.20	70.70	71.74	65.08
2,000 . . .	128.40	122.00	122.00	128.40	131.06	122.61
3,000 . . .	331.60	315.00	315.00	331.60	339.65	326.54
4,000 . . .	604.00	573.80	573.80	604.00	619.06	603.29
6,000 . . .	1,316.40	1,250.60	1,250.60	1,316.40	1,348.94	1,328.54
10,000 . . .	3,160.70	3,002.70	3,002.70	3,160.70	3,239.55	3,212.00
TAXPAYER WITH DEPENDENT WIFE AND TWO CHILDREN						
500 . . .	. .	. .	. .	. .	. .	. .
600 . . .	. .	. .	. .	. .	. .	. .
800 . . .	. .	. .	. .	. .	. .	. .
1,000 . . .	5.10	4.80	. .	. .	. .	. .
1,200 . . .	16.00	15.20	15.20	16.00	16.04	11.12
1,600 . . .	54.40	51.70	51.70	54.40	55.08	46.42
2,000 . . .	107.80	102.40	102.40	107.80	109.88	98.49
3,000 . . .	299.70	284.70	284.70	299.70	306.87	289.54
4,000 . . .	565.60	537.30	537.30	565.60	579.62	555.95
6,000 . . .	1,266.60	1,203.30	1,203.30	1,266.60	1,297.90	1,267.29
10,000 . . .	3,093.50	2,938.80	2,938.80	3,093.50	3,170.66	3,129.32

(a) Income remaining after allowing all deductions other than deductions for dependants.

Company income taxes

For taxation purposes companies are divided into two main groups—private and public. Broadly, a private company is defined as a company in which all the issued shares are held by not more than twenty persons, or which is capable of being controlled by not more than seven persons, and which is not a company in which the public is substantially interested, or is a subsidiary of a public company. All other companies are regarded as public companies. Both private and public companies pay primary tax assessed on a taxable income ascertained on the same principles as for individuals.

Dividends received are assessable income; resident companies, however, receive a rebate at the average rate on the amount of dividends included in the taxable income, while this rebate is not allowed to non-resident companies.

Rates of tax. A private company incurs liability for additional tax on its undistributed income if it fails to make a sufficient distribution of income within a specified period after the close of the year of income. The tax is levied on the undistributed amount which, for practical purposes, is the taxable income less—(*a*) primary income tax payable; (*b*) retention allowance (i.e. the proportion of the reduced distributable income which a company may retain without incurring liability for undistributed income tax); and (*c*) certain dividends paid by the company.

The rates of primary tax for all companies and additional tax for private companies applicable to income years 1956–57 to 1967–68 are shown in the following table.

RATES OF TAX: COMPANIES, 1956–57 TO 1967–68 INCOME YEARS
(Cents per $)

	Resident private company			*Resident public company(a)*		*Non-resident company*	
	On taxable income		*Additional tax on undistributed income*	*On taxable income*		*On dividends only*	
Income years ended June	*Up to $10,000*	*On remainder*		*Up to $10,000*	*On remainder*	*Up to $10,000*	*On remainder*
1957 to 1959 .	22½	32½	50	32½	37½	27½	37½
1960 to 1963 .	25	35	50	35	40	30	40
1964 to 1967 .	27½	37½	50	37½	42½	32½	42½
1968 . . .	30	40	50	40	45	35	45

(*a*) Excludes co-operative, non-profit and life insurance for which the rates of tax (in cents per $) for 1967–68 were as under:

	Taxable income	
Type of company	*Up to $10,000*	*On remainder*
Co-operative	35	45
Non-profit—Friendly societies' dispensaries .	35	35
Other	35	45
Mutual life insurance	30	40
Other life insurance—Mutual income . .	30	40
Other income . .	40	45

For 1967–68 where the taxable income of a non-profit company did not exceed $1,386 the amount of tax payable was limited to half the amount by which the taxable income exceeded $416.

For the income years 1956–57 to 1967–68 the retention allowance (*see* above) was the proportion of the reduced distributable income shown in the following table.

RETENTION ALLOWANCE: PRIVATE COMPANIES 1956–57 TO 1967–68 INCOME YEARS
(Per cent)

Reduced distributable income(a)	*1956–57 and 1957–58*	*1958–59 to 1961–62*	*1962–63 to 1967–68*
First $2,000 or part . . .	50	50	. .
Next $2,000 ,, ,, . . .	40	40	. .
,, $2,000 ,, ,, . .	35	. .	. .
,, $2,000 ,, ,, . .	30	. .	. .
First $10,000 ,, ,, . .	. .	. .	50
Next $10,000 ,, ,, . .	. .	. .	45
Balance	25	35	40

(*a*) Calculated by deducting from the taxable income the primary tax payable and the amount of all property income included in taxable income.

In addition to the foregoing proportions, 10 per cent of distributable income from property, except dividends from other private companies, is also allowed.

The additional tax on undistributed income is imposed at a flat rate of 50 cents in the dollar on the undistributed amount.

Income tax assessments

1966–67 *income year*. The following tables show, for the 1966–67 income year, the number of taxpayers, income, and net income tax assessed for individuals and resident and non-resident companies. For further information of this nature *see* the annual bulletin *Commonwealth Taxation Assessments*.

COMMONWEALTH INCOME TAX ASSESSMENTS(*a*): RESIDENT INDIVIDUALS BY GRADE OF INCOME AND BY STATE, ETC. OF ASSESSMENT

(Income derived in the year 1966-67)

Grade of actual income(b)($) and State or Territory of assessment	*Taxpayers*			*Actual income(b)*	*Taxable income(c)*			*Net tax assessed*
	Males	*Females*	*Total*	*Total*	*Salary and wages*	*Other income*	*Total*	
	No.	No.	No.	$'000	$'000	$'000	$'000	$'000
417– 599	42,426	91,642	134,068	68,610	54,278	11,388	65,666	1,431
600– 799	52,917	118,754	171,671	120,308	92,112	19,301	111,413	3,562
800– 999	64,201	132,794	196,995	177,701	135,167	26,101	161,268	7,100
1,000– 1,199	78,793	153,175	231,968	255,339	191,200	37,772	228,972	12,641
1,200– 1,399	86,985	156,808	243,793	316,966	233,275	48,280	281,554	18,526
1,400– 1,599	96,438	175,505	271,943	408,079	304,402	56,621	361,023	27,385
1,600– 1,799	104,587	172,257	276,844	470,567	349,708	64,473	414,181	35,234
1,800– 1,999	125,273	139,031	264,304	502,039	361,860	72,126	433,986	40,321
2,000– 2,199	162,015	107,995	270,010	567,296	398,910	79,696	478,606	47,865
2,200– 2,399	196,811	77,826	274.637	631,695	439,013	81,834	520,848	55,529
2,400– 2,599	224,860	55,865	280,725	701,542	478,813	85,778	564,590	63,381
2,600– 2,799	237,830	38,672	276,502	746,005	506,277	85,991	592,268	70,252
2,800– 2,999	232,537	29,467	262,004	759,095	512,134	87,130	599,265	75,065
3,000– 3,999	839,100	82,998	922,098	3,169,995	2,066,109	401,047	2,467,156	351,613
4,000– 5,999	536,322	55,343	591,665	2,800,488	1,617,290	553,100	2,170,389	394,361
6,000– 7,999	123,002	17,912	140,914	959,918	432,778	330,014	762,792	179,821
8,000– 9,999	43,977	7,513	51,490	456,466	162,696	211,996	374,692	105,428
10,000–19,999	47,800	7,735	55,535	722,575	191,622	425,595	617,217	223,020
20,000–29,999	5,450	845	6,295	148,867	29,840	102,934	132,774	63,229
30,000 and over	2,175	349	2,524	115,410	19,207	83,969	103,176	58,389
Central Office	9,104	6,319	15,423	106,294	23,443	66,735	90,177	30,480
New South Wales	1,216,238	604,871	1,821,109	5,229,066	3,330,284	929,472	4,259,755	678,546
Victoria	926,650	493,630	1,420,280	4,127,921	2,537,607	849,596	3,387,203	555,592
Queensland	450,148	193,823	643,971	1,763,152	973,585	412,711	1,386,295	210,263
South Australia	314,372	150,241	464,613	1,246,829	747,383	261,539	1,008,922	149,709
Western Australia	241,006	109,218	350,224	1,006,632	569,605	247,869	817,474	130,240
Tasmania	103,552	44,052	147,604	402,903	247,599	71,319	318,918	47,582
Northern Territory	11,280	3,628	14,908	52,101	30,890	6,206	37,095	6,196
Australian Capital Territory	31,149	16,704	47,853	164,062	116,298	19,698	135,996	25,547
Total, residents	**3,303,499**	**1,622,486**	**4,925,985**	**14,098,961**	**8,576,693**	**2,865,144**	**11,441,836**	**1,834,154**
Total, non-residents	*734*	*353*	*1,087*	*4,126*	*1,374*	*2,369*	*3,743*	*1,179*
Total, residents and non-residents	*3,304,233*	*1,622,839*	*4,927,072*	*14,103,087*	*8,578,066*	*2,867,513*	*11,445,578*	*1,835,333*

(*a*) Assessments in respect of 1966–67 incomes issued to 30 September 1968. Assessments issued after that date are not included. (*b*) Actual income is defined briefly as 'Gross income including exempt income less expenditure incurred in gaining that income'. (*c*) Taxable income is the income remaining after deducting from assessable income all allowable deductions.

COMMONWEALTH INCOME TAX ASSESSMENTS: RESIDENT AND NON-RESIDENT COMPANIES, BY GRADE OF INCOME AND STATE, ETC., OF ASSESSMENT

Grade of taxable income(b) ($) and State or Territory of assessment	*Taxable*				*Non-taxable*		
	Companies	*Actual income (a)*	*Taxable income (b)*	*Net tax assessed (c)*	*Companies*	*Taxable income (b)(d)*	*Loss*
INCOME DERIVED IN THE YEAR 1965–66							
	No.	$'000	$'000	$'000	No.	$'000	$'000
Loss for year					28,407		(*e*) 193,680
Nil					13,281		
1– 1,999	22,377	23,232	15,259	4,108	3,053	2,209	
2,000– 9,999	27,102	160,971	147,525	38,567	3,429	16,930	
10,000– 19,999	11,267	168,911	156,001	45,061	1,004	14,047	
20,000– 39,999	5,940	174,230	165,264	52,463	498	13,816	
40,000– 99,999	3,833	250,883	235,281	78,636	290	17,639	
100,000– 199,999	1,414	214,046	197,506	66,727	111	16,019	
200,000– 399,999	756	223,500	209,779	69,192	44	12,207	
400,000– 999,999	523	337,080	317,588	101,728	45	25,484	
1,000,000–1,999,999	153	221,602	205,024	63,002	15	19,688	
2,000,000 and over	150	1,174,522	858,815	267,441	4	21,764	
Central Office	3,593	1,446,922	1,082,520	350,853	1,456	35,107	(*f*) 36,885
New South Wales	29,425	587,616	556,909	170,136	19,898	42,407	70,660
Victoria	20,803	438,735	417,157	123,174	13,914	34,683	33,362
Queensland	6,536	156,490	147,420	50,790	4,742	7,996	24,061
South Australia	6,778	124,777	118,565	37,090	4,775	11,112	8,711
Western Australia	3,068	94,791	90,352	31,538	2,025	2,702	7,836
Tasmania	1,445	34,569	33,123	10,337	950	1,235	2,410
Northern Territory	261	5,895	4,978	1,597	170	124	1,146
Australian Capital Territory	1,606	59,182	57,018	11,411	2,251	24,436	8,608
Total	**73,515**	**2,948.978**	**2,508,042**	**786,925**	**50,181**	**159,802**	**193,680**
INCOME DERIVED IN THE YEAR 1966–67							
Loss for year					29,362		(*e*)219,700
Nil					15,780		
1– 1,999	23,333	32,041	15,972	4,313	3,425	2,577	
2,000– 9,999	28,611	169,318	155,849	40,961	3,774	19,004	
10,000– 19,999	12,070	174,697	166,761	48,306	1,078	14,911	
20,000– 39,999	6,316	185,251	175,815	55,278	503	13,812	
40,000– 99,999	4,108	266,972	252,261	84,062	329	20,135	
100,000– 199,999	1,476	220,448	205,729	69,563	118	16,235	
200,000– 399,999	854	248,268	235,196	80,280	57	15,508	
400,000– 999,999	529	351,145	327,798	106,197	32	20,587	
1,000,000–1,999,999	166	238,399	226,191	67,283	5	6,395	
2,000,000 and over	167	1,238,319	889,605	276,340	5	18,392	
Central Office	3,727	1,492,182	1,099,361	352,748	1,547	27,064	(*f*) 52,240
New South Wales	31,302	622,448	593,200	183,576	21,655	40,706	69,953
Victoria	21,595	492,201	469,170	139,696	14,583	33,136	37,109
Queensland	7,139	170,925	163,167	56,033	5,358	7,002	19,174
South Australia	6,839	125,488	120,145	38,368	5,432	11,619	12,316
Western Australia	3,419	112,103	101,735	35,242	2,272	2,918	14,085
Tasmania	1,539	37,087	35,454	11,046	1,022	1,399	2,669
Northern Territory	332	7,624	6,611	2,132	183	183	1,274
Australian Capital Territory	1,738	64,797	62,335	13,741	2,416	23,526	10,879
Total	**77,630**	**3,124,855**	**2,651,178**	**832,582**	**54,468**	**147,554**	**219,700**

(*a*) Actual income is defined briefly as 'Gross income including exempt income less expenditure incurred in gaining that income'. (*b*) Taxable income is the income remaining after deducting from assessable income all allowable deductions. (*c*) Excludes additional tax levied on the undistributed income of private companies. (*d*) Net tax assessed is nil because of rebates. (*e*) This figure is not included in the total shown for taxable income. (*f*) Not included in figures shown in adjoining column.

Income tax on residents, by grade of income. Individual income taxes assessed on residents are distributed according to grades of actual income in the following table. The year shown in each case is the year of income of the taxpayer. Assessments issued after the normal assessing period are not included.

COMMONWEALTH INCOME TAX ASSESSMENTS: RESIDENT INDIVIDUALS, BY GRADE OF ACTUAL INCOME(*a*)

(Income years 1963-64 to 1966-67)

Grade of actual income(a) ($)	*Income year*							
	1963–64		*1964–65*		*1965–66*		*1966–67*	
	Tax-payers	*Net tax assessed*	*Tax-payers*	*Net tax assessed*	*Tax-payers*	*Net tax assessed*	*Tax-payers*	*Net tax assessed*
	No.	$'000	No.	$'000	No.	$'000	No.	$'000
417– 599	138,394	1,231	137,122	1,296	141,676	1,589	134,068	1,431
600– 799	199,007	3,843	190,233	3,872	182,683	3,847	171,671	3,562
800– 999	227,856	7,619	221,616	7,878	214,957	7,826	196,995	7,100
1,000– 1,199	247,499	12,438	247,883	13,242	245,847	13,440	231,968	12,641
1,200– 1,399	275,192	19,435	259,250	19,403	259,366	19,810	243,793	18,526
1,400– 1,599	281,919	25,676	278,864	27,264	280,021	28,135	271,943	27,385
1,600– 1,799	276,321	30,431	266,670	32,210	272,872	34,171	276,844	35,234
1,800– 1,999	298,924	37,889	270,858	38,126	262,280	38,824	264,304	40,321
2,000– 2,199	325,933	47,038	291,532	47,004	280,326	47,834	270,010	47,865
2,200– 2,399	317,493	52,253	293,571	53,046	284,991	55,588	274,637	55,529
2,400– 2,599	290,118	54,852	290,225	59,929	288,127	63,715	280,725	63,381
2,600– 2,799	260,853	55,391	275,392	64,662	284,841	70,434	276,502	70,252
2,800– 2,999	215,722	51,851	248,244	65,743	260,131	72,227	262,004	75,065
3,000– 3,999	604,971	198,324	765,272	273,694	831,852	309,965	922,098	351,613
4,000– 5,999	321,603	195,496	403,473	260,996	473,003	314,647	591,665	394,361
6,000– 7,999	88,638	104,323	99,934	126,301	111,480	143,944	140,914	179,821
8,000– 9,999	37,764	70,930	40,478	82,261	42,430	88,221	51,490	105,428
10,000–19,999	43,394	165,453	43,479	174,880	46,226	191,563	55,535	223,020
20,000–29,999	5.174	48,617	4,894	48,492	5,302	53,912	6,295	63,229
30,000–59,999	1,933	34,220	1,750	32,937	1,892	35,784	2,198	41,525
60,000–99,999	220	7,869	200	7,541	189	7.836	248	9,885
100,000 and over . .	78	5,916	71	5,955	60	4,941	78	6,979
Total .	**4,459,006**	**1,231,097**	**4,631,011**	**1,446,732**	**4,770,552**	**1,608,256**	**4,925,985**	**1,834,154**

(*a*) Actual income is defined briefly as 'Gross income including exempt income less expenditure incurred in gaining that income'.

Yield of income taxes

Income taxes collected. The following table shows the amounts of taxes collected and the proportions of the several components in the years 1963–64 to 1967–68.

INCOME TAXES COLLECTED, 1963-64 TO 1967-68

Source of income tax	*Collection year*				
	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
	AMOUNTS COLLECTED ($'000)				
Individuals—					
Instalments—salaries and wages .	792,242	990,600	1,160,369	1,323,537	1,507,456
Direct cash payments . . .	479,916	579,762	570,799	598,509	669,091
Companies	586,260	709,044	801,105	784,544	836,664
Superannuation funds . . .	130	162	175	534	858
Withholding tax—Dividend . .	15,936	16,039	17,247	22,708	21,716
Interest . .	. .	. .	. .	. .	910
Total	**1,874,484**	**2,295,607**	**2,549,695**	**2,729,832**	**3,036,695**

INCOME TAXES COLLECTED, 1963-64 TO 1967-68—*continued*

Source of income tax	*Collection year*				
	1963-64	*1964-65*	*1965-66*	*1966-67*	*1967-68*
	PERCENTAGES				
Individuals—					
Instalments—salaries and wages	42.26	43.15	45.51	48.48	49.64
Direct cash payments	25.60	25.26	22.38	21.93	22.03
Companies	31.28	30.89	31.42	28.74	27.55
Superannuation funds	0.01	0.01	0.01	0.02	0.03
Withholding tax—Dividend	0.85	0.70	0.68	0.83	0.72
Interest	..	..	..	..	0.03
Total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

Income tax assessed. The amounts of income tax covered by statistical analyses of assessments for recent years are shown in the following table. The amounts are shown under the year of income of the taxpayer. Tax is usually paid by companies in the year following the year of income. Individuals pay tax in the year of income, but there is usually an adjustment in the following year. Tax assessed after the close of the normal assessing period is not included.

INCOME TAXES ASSESSED, 1962-63 TO 1966-67
($'000)

Tax	*Income year—*				
	1962-63	*1963-64*	*1964-65*	*1965-66*	*1966-67*
Individuals	1,056,060	1,232,442	1,447,886	1,608,952	1,835,333
Companies—					
Primary tax	599,972	715,938	787,099	786,925	832,582
Additional tax on undistributed income of private companies	1,532	1,609	2,260	2,618	2,934
Total	**1,657,564**	**1,949,989**	**2,237,245**	**2,398,495**	**2,670,849**

Refunds of revenue. Income tax collections, as previously shown, are net amounts after refunds of revenue made in the course of the year. Refunds are of two types—those charged to special appropriations under authority of the Income Tax Assessment Act and those charged to special appropriations under authority of the Audit Act. Income tax instalment refunds, by far the greatest part of income tax refunds, are made when the instalments deducted during the year exceed the tax assessed on incomes for that year. Refunds made from special appropriations under section 37A of the Audit Act include refunds of moneys paid to the revenue in error, refunds of tax overpaid, refunds due to the amendment of assessments, etc. Refunds of income tax during the collection years 1963-64 to 1967-68 were: 1963-64, $242,422,000; 1964-65, $264,366,000; 1965-66, $305,830,000; 1966-67, $353,194,000 and 1967-68, $398,371,000.

CHAPTER 20

LOCAL GOVERNMENT

This chapter includes, in addition to information on the operation of local government authorities, information on the operation of certain semi-governmental authorities. The latter information is not comprehensive for this type of authority, and is included partly because of the association of the functions performed with those of local government authorities, and partly for convenience in preparation. Particulars of the activities of other semi-governmental authorities, e.g. transport, electricity and gas, and banking undertakings, for which only some financial statistics are given in this chapter, are included in the chapters relevant to those subjects.

Coverage

Local government authorities

In each State of the Commonwealth there exists a system of local government whose powers and responsibilities are in general similar, and cover such matters as the construction and maintenance of roads, streets and bridges, water, sewerage and drainage systems, and health and sanitary services, the supervision of building, and the administration of regulations relating to items such as weights and measures, slaughtering, the registration of dogs, etc. In addition to these obligatory functions, there are also many which may be performed by a local government authority either with or without the consent of the ratepayers or the Governor-in-Council. These include transport facilities, electricity, gas, and other business undertakings, hospitals, charitable institutions, recreation grounds, parks, baths, libraries, museums, etc.

The system is based on the principle of a grant of specific powers by the State legislatures to the local authorities, their autonomy, however, being more or less limited by the provision for general supervision by a department of the central government or by the Governor-in-Council. Otherwise, within the scope of the Acts under which they are constituted or which they have to administer, they are responsible only to the ratepayers. While the broad pattern of local government throughout the States of Australia is similar, the range of activities, election of officers, methods of valuation and rating powers, etc. differ considerably.

The areas over which local government bodies, numbering 900, exercise general control, are known in New South Wales as cities, municipalities and shires; in Victoria as cities, towns, boroughs and shires; in Queensland as cities, towns and shires; in South Australia as cities, corporate towns and district council areas; in Western Australia as cities, towns and shires; and in Tasmania as cities and municipalities. In New South Wales some local government authorities in an area have combined to provide services such as electricity, water, sewerage and drainage—e.g. the county councils. Within shires there are also some municipal units known as urban areas. Apart from the more thinly populated parts of New South Wales and South Australia, and the Commonwealth Territories (except for the City of Darwin), practically the whole of Australia comes within local government jurisdiction.

The financial statistics in the following section are classified under the headings of Ordinary Services and Business Undertakings. The former covers the obligatory and general functions referred to above. Business Undertakings include public utilities such as water supply, sewerage, electricity, gas, transport and hydraulic power undertakings, and other miscellaneous works such as abattoirs, quarries, ice works, cinemas, etc.

Semi-governmental authorities

In addition to local government authorities, a large number of authorities have been set up to control specific activities, which are often identical with some of those performed by either, or both of the other classes of public authority—central government and local government—and a complete picture of any field of activity for a State or Australia as a whole cannot be obtained without reference to each class operating in that particular field. These semi-governmental authorities differ primarily from local government authorities in that their operations are restricted to the specific activity for which they were constituted—e.g. roads and bridges, water and sewerage, electricity and irrigation, harbours, or tramways, etc.—i.e. each dispenses a specific service throughout an area as distinct from the general services of the local authority. In the sections which deal with debt, roads and bridges, water supply and sewerage, harbours, and fire brigades particulars are included of the more important of these authorities which operate within the range covered by this chapter.

Roads, bridges, etc.

The construction and maintenance of roads, bridges and ferries are generally part of the functions of local authorities, but in each State there exists a central road authority or a government department whose duties relate to the construction, reconstruction and maintenance of 'main' and 'developmental' roads, the distribution of funds to local bodies, and the supervision and co-ordination of road construction and policy throughout the State. Owing to difficulty in obtaining complete particulars of receipts and expenditure of the various local governing bodies in respect of roads under their control, the details of receipts and expenditure given on pages 786–93 are those of central governments only, relating either to the supervisory board or commission in the State or to direct activities of a department. However, estimates of the aggregate net expenditure of all public authorities concerned with roads and bridges in Australia are given on page 794 of that section. On pages 779–81 some information is given of the revenue and expenditure of local government authorities in respect of roads.

Water supply and sewerage

In the cities of Sydney, Melbourne and Perth the control of water supply and sewerage is in the hands of special boards, while in Adelaide these services are under the direct supervision of a government department. In most of the other cities and towns the municipal councils or, in some cases, water trusts are the controlling bodies, which either construct the works out of their own resources or take them over after they have been constructed by the government.

Harbours

The majority of the harbours in Australia are managed by boards, the members of which are either elected by persons interested, or appointed by the government. In some instances, however, they are directly controlled by the government.

Fire brigades

In all the States the management of fire brigades is undertaken by boards. These boards usually comprise members elected by the councils of municipalities and insurance companies within the districts placed under their jurisdiction, and one or more members appointed by the government. Occasionally volunteer or country fire brigades are represented.

Local government authorities

New South Wales

For purposes of local government the whole of the Eastern and Central land divisions and more than two-thirds of the sparsely populated Western division have been divided into cities, municipalities (most principal towns) and shires (mainly large rural areas, some of which include important towns). At the end of 1968 the area incorporated was 272,000 square miles, or nearly nine-tenths of the total area of the State. All cities, municipalities and shires in the State are subject to the general provisions of the Local Government Act. Municipalities and shires may combine to form county councils for the establishment and conduct of services of joint benefit, e.g. electricity, water, gas, abattoirs. At 31 December 1968 there were fifty-three county councils, including the Sydney County Council (constituted under the Gas and Electricity Act).

Victoria

Local government is established throughout the State, the various divisions being termed cities, towns, boroughs, or shires. The only unincorporated areas are French Island (41,600 acres) in Westernport Bay, Lady Julia Percy Island (653 acres) off Port Fairy, Bass Strait Islands (966 acres), part of Gippsland Lakes (81,920 acres), and Tower Hill (1,459 acres) adjacent to the Borough of Koroit. Melbourne and Geelong were incorporated under special statutes prior to the establishment of a general system of local government, but are now subject to several provisions of the Local Government Act.

Queensland

The whole of the State (except certain islands along the coast, the Dawson Valley Irrigation Area and the Somerset Dam Area) is incorporated into cities, towns and shires under the Local Government Act (City of Brisbane Act in the case of Brisbane).

South Australia

The settled portion of South Australia is incorporated, being mostly under municipal corporations in the larger cities and towns and district councils in the agricultural areas.

Western Australia

Local government is established throughout the State, the divisions being cities, towns and shires.

Tasmania

The whole State is divided into municipal districts, Hobart, Launceston, and Glenorchy being incorporated as cities under separate Acts.

Area, population, dwellings, and value of rateable property

The area, population, dwellings, and value of rateable property in the incorporated areas of each State are shown in the following table. The valuations relate to rateable property only and exclude government and other non-rateable property, whose value in the aggregate is considerable. In some cases councils rate on annual value, or unimproved capital value, or improved capital value, or partly on each of these bases of valuation. The amounts stated are the totals for the areas rated according to each basis of valuation. Particulars of dwellings are in accordance with the definition used in the 1966 census, and are compiled from information collected on the census schedules. For the purpose of the census a dwelling was defined as any habitation occupied by a household group living together as a domestic unit, whether comprising the whole or only part of a building. The term has, therefore, a very wide reference and includes, in addition to houses and flats, a great variety of dwellings ranging from a single-roomed shack to a multi-roomed hotel or institution. Unoccupied dwellings include vacant dwellings available for sale and renting, 'week-end' and holiday dwellings, and other dwellings temporarily unoccupied on the night of the Census. Dwellings being built are not included.

In the following table particulars of number, area, and value of rateable property refer to estimates made, where practicable, for the capital city statistical division and outside this division. Wherever the statistical boundary cuts across a local government area the estimates have involved either the inclusion or exclusion of the whole of the local government authority concerned in, or from, the capital city statistical division. Particulars of population refer to estimates made for capital city statistical division and outside this division in accordance with the definition of boundaries used in the 1966 census and exclude migratory population and population in unincorporated areas.

LOCAL GOVERNMENT AUTHORITIES: AREA, POPULATION, DWELLINGS, AND VALUE OF RATEABLE PROPERTY, STATES, 1966-67

Location	*Number*	*Area*	*Population*	*Dwellings*		*Value of rateable property*		
				Occupied	*Unoccupied*	*Unimproved capital value*	*Improved capital value*	*Annual value*
		'000 acres	*'000 (a)*	*No. (b)*	*No. (b)*	*$'000*	*$'000*	*$'000*
New South Wales(*c*)—								
Sydney Statistical Division .	39	974	2,592	730,877	39,701	3,504,792	8,699,706	291,938
Other	185	173,383	1,704	458,069	61,577	1,596,728	n.a.	n.a.
Total, New South Wales	*224*	*174,357*	*4,296*	*1,188,946*	*101,278*	*5,101,520*	*n.a.*	*n.a.*
Victoria(*d*)—								
Melbourne Statistical Division	55	1,933	2,277	626,343	35,445	n.a.	8,373,128	433,080
Other(*e*)	155	54,177	990	262,617	29,302	n.a.	4,000,419	201,272
Total, Victoria . .	*210*	*56,110*	*3,267*	*888,960*	*64,747*	*n.a.*	*12,373,547*	*634,352*
Queensland(*a*)—								
Brisbane Statistical Division	n.a.	n.a.	795	215,669	10,777	n.a.	n.a.	n.a.
Other	n.a.	n.a.	900	232,752	30,945	n.a.	n.a.	n.a.
Total, Queensland .	*131*	*426,226*	*1,695*	*448,421*	*41,722*	*1,209,436*	*n.a.*	*n.a.*
South Australia(*a*)—								
Adelaide Statistical Division	31	573	784	217,590	12,089	n.a.	2,530,000	126,490
Other	111	36,454	310	81,662	12,502	n.a.	1,047,000	52,375
Total, South Australia .	*142*	*37,028*	*1,094*	*299,252*	*24,591*	*n.a.*	*3,577,000*	*178,865*
Western Australia(*a*)—								
Perth Statistical Division .	27	1,326	580	154,984	8,211	285,177	n.a.	27,050
Other	117	623,263	293	69,675	9,751	200,457	n.a.	5,328
Total, Western Australia	*144*	*624,589*	*873*	*224,659*	*17,962*	*485,634*	*n.a.*	*32,378*

For footnotes *see* next page.

LOCAL GOVERNMENT AUTHORITIES: AREA, POPULATION, DWELLINGS, AND VALUE OF RATEABLE PROPERTY, STATES, 1966-67—*continued*

Location	Number	Area	Population	Dwellings		Value of rateable property		
				Occupied	Unoccupied	Unimproved capital value	Improved capital value	Annual value
		'000 acres	'000 (a)	No. (b)	No. (b)	$'000	$'000	$'000
Tasmania(a)—								
Hobart Statistical Division .	5	392	143	37,947	2,836	158,364	536,124	31,126
Other	44	16,493	233	61,418	7,964	192,446	814,619	48,210
Total, Tasmania . .	*49*	*16,885*	*376*	*99,365*	*10,800*	*350,810*	*1,350,742*	*79,337*

(*a*) Year ended 30 June 1967. Total population less migratory and unincorporated. (*b*) Particulars as at Census 30 June 1966. (*c*) Year ended 31 December 1965. (*d*) Year ended 30 September 1967. (*e*) Excludes Yallourn Works Area under the jurisdiction of the State Electricity Commission.

Local government finances

The following tables show the latest available financial statistics for local government authorities. The figures relate to the year 1966–67 except for New South Wales, where they relate to the year 1965. For further detail on local government finances *see State, Territory and Local Government Authorities' Finance and Government Securities*, Bulletin No. 6, 1967–68, issued by this Bureau.

Ordinary services. In the returns of revenue and expenditure in the following tables the proceeds from loans and expenditure thereof have been excluded. The financial operations of business undertakings controlled by the various local government authorities are given in the next paragraph. The profits resulting from the working of these undertakings, where taken into general revenue, have been included.

LOCAL GOVERNMENT AUTHORITIES: ORDINARY SERVICES—REVENUE AND EXPENDITURE, STATES, 1966-67

	N.S.W. (a)	Vic. (b)	Qld (c)	S.A. (c)	W.A. (c)	Tas. (c)	Total
REVENUE (EXCLUDING LOAN RECEIPTS) ($'000)							
Taxation—							
Rates (net)	113,975	80,804	39,838	22,875	15,039	8,584	282,565
Penalties	1,118	331	..	..	..		
Licences	2,311	518	670	222	277	129	4,128
Vehicle registration fees and taxes	..	..	..	..	4,463	..	4,463
Total, taxation. . .	*117,404*	*81,653*	*40,508*	*23,097*	*19,779*	*8,714*	*291,156*
Public works and services—							
Sanitary and garbage services .	9,607	3,594	7,740	340	1,344	61	22,685
Council properties . . .	10,436	(*d*)15,172	2,247	1,660	4,196	1,199	34,911
Street construction . .	6,886	(*b*)23,815	..	4,863	3,371	181	39,116
Other	12,915	4,332	1,564	388	1,149	406	20,753
Total, public works etc. .	*39,844*	*46,912*	*11,550*	*7,251*	*10,060*	*1,847*	*117,465*
Government grants—							
Roads	32,161	714	5,044	(*e*)8,769	7,987	1,374	56,049
Other	4,977	4,625	2,547	491	411	267	13,317
Total government grants .	*37,138*	*5,339*	*7,591*	*9,260*	*8,398*	*1,640*	*69,367*
Profits from business undertakings	..	783	..	168	..	..	951
Fees and fines	..	1,236	..	537	287	649	24,074
All other	..	1,308	(*f*)18,864		1,191		
Total revenue . . .	**194,387**	**137,232**	**78,514**	**40,314**	**39,716**	**12,850**	**503,012**

For footnotes *see* next page.

LOCAL GOVERNMENT AUTHORITIES: ORDINARY SERVICES—REVENUE AND EXPENDITURE, STATES, 1966–67—*continued*

	N.S.W. (*a*)	*Vic.* (*b*)	*Qld* (*c*)	*S.A.* (*c*)	*W.A.* (*c*)	*Tas.* (*c*)	*Total*
EXPENDITURE (EXCLUDING LOAN EXPENDITURE) ($'000)							
General administration	13,427	16,340	7,244	3,568	3,403	1,593	45,574
Debt services (excluding business undertakings)—							
Interest	7,879	(*b*)9,162	9,568	2,089	2,462	1,341	32,501
Redemption	13,652	(*b*)11,094	9,578	2,652	3,854	1,381	42,211
Exchange	..	..	196	..	..	..	196
Other	..	(*b*)91	120	..	..	..	211
Total, debt, etc.	*21,531*	*20,347*	*19,462*	*4,741*	*6,316*	*2,722*	*75,118*
Public works and services—							
Roads, streets and bridges	83,343	(*b*)49,142	21,799	21,768	13,710	4,429	194,191
Health administration	5,198	1,266	8,538	716	644	247	39,801
Sanitary and garbage services	13,004	6,804		1,243	1,648	493	
Street lighting	4,349	2,404	1,214	886	547	359	9,758
Council properties	25,929	(*g*)21,054	8,746	4,326	9,719	1,949	71,724
Other	10,896	9,541	939	821	3,238	155	25,590
Total, public works, etc.	*142,719*	*90,211*	*41,236*	*29,760*	*29,506*	*7,632*	*341,063*
Grants—							
Fire brigades	1,043	1,809	551	309	364	151	4,226
Hospitals and ambulances	627	352	..	781	26	122	14,535
Other charities			..	16	195	95	
Other	(*h*)6,170	(*i*)3,689	2,367	94			
Total, grants	*7,840*	*5,850*	*2,918*	*1,201*	*585*	*368*	*18,761*
All other	7,487	(*b*)4,237	(*j*)12,289	11	525	96	24,645
Total expenditure	**193,004**	**136,984**	**83,150**	**39,280**	**40,334**	**12,411**	**505,162**

(*a*) Figures for New South Wales relate to the year ended 31 December 1965, and are on an income and expenditure basis as distinct from those of other States which are on a cash basis. (*b*) Year ended 30 September 1967. Figures for Victoria now include transactions of Private Street Accounts. (*c*) Year ended 30 June 1967. (*d*) Includes $7,386,000 plant hire. (*e*) Includes $5,016,000 reimbursement from Highways Department. (*f*) Includes the following reimbursements: $4,810,000 from Main Roads Department, $1,485,000 from other State Government Departments, and $5,907,000 from other sources. (*g*) Includes $1,504,000 plant and equipment. (*h*) To Main Roads Department. (*i*) Includes $1,763,000 to Country Roads Board. (*j*) Includes expenditure on work done for reimbursement: for Main Roads Department $4,818,000; for other State Government Departments $1,422,000; other $5,722,000.

LOCAL GOVERNMENT AUTHORITIES: ORDINARY SERVICES—REVENUE AND EXPENDITURE, STATES, 1962–63 TO 1966–67

($'000)

Year	*N.S.W.* (*a*)	*Vic.* (*b*)	*Qld* (*c*)	*S.A.* (*c*)	*W.A.* (*c*)(*d*)	*Tas.* (*c*)	*Total*
Revenue(*e*)—			(*d*)				
1962–63	159,998	95,293	60,250	27,589	25,163	9,796	378,089
1963–64	169,130	103,289	61,846	31,836	28,036	10,478	404,615
1964–65	187,689	116,405	66,088	32,360	34,921	10,930	448,393
1965–66	194,387	125,017	73,655	36,190	34,274	11,818	475,340
1966–67	(*f*)	137,232	78,514	40,314	39,716	12,850	(*f*)
Expenditure(*e*)—							
1962–63	159,515	92,582	61,901	27,341	24,902	9,434	375,676
1963–64	165,695	103,320	64,337	32,018	28,476	10,282	404,128
1964–65	181,265	119,013	70,730	33,147	31,588	11,278	447,022
1965–66	193,004	130,392	77,713	37,136	35,400	11,585	485,230
1966–67	(*f*)	136,984	83,150	39,280	40,334	12,411	(*f*)

(*a*) Years ended previous 31 December. (*b*) Years ended 30 September. Figures for Victoria now include transactions of Private Street Accounts. (*c*) Years ended 30 June. (*d*) Revised. (*e*) Excludes loan receipts or expenditure. (*f*) Not yet available.

Business undertakings. The tables following show particulars of the revenue and expenditure, other than loan, of business undertakings under the control of local government authorities. These particulars are not included in the foregoing tables.

LOCAL GOVERNMENT AUTHORITIES: BUSINESS UNDERTAKINGS—REVENUE AND EXPENDITURE, STATES, 1966-67

($'000)

	N.S.W. (*a*)	*Vic.* (*b*)	*Qld* (*c*)	*S.A.* (*c*)	*W.A.* (*c*)	*Tas.* (*c*)	*Total*
REVENUE (EXCLUDING LOAN RECEIPTS)							
Water supply and sewerage—							
Rates	9,831	643	(*d*)12,315	..	226	4,245	39,531
Charges for services and sales of products	3,203		8,483	1	41	544	
Other (including grants)	(*e*)3,131	15	1,700	..	51	894	5,791
Total, water supply, etc.	16,165	*657*	*22,498*	*1*	*318*	*5,683*	*45,323*
Electricity and gas—							
Rates	1,208	47,431	24	..	..	..	287,583
Charges for services and sales of products	202,755		32,428	1,116	2,621	..	
Other (including grants)	(*e*)6,557	347	3,959	500	..	..	11,363
Total, electricity, etc.	*210,520*	*47,778*	*36,411*	*1,616*	*2,621*	..	*298,947*
Railways, tramways and omnibuses—							
Charges for services and sales of products	..	..	8,438	..	..	..	8,438
Other (including grants)	..	..	317	..	..	..	317
Total, railways, etc.	..	..	*8,755*	..	..	..	8,755
Other—	(*f*)	(*g*)	(*h*)	(*i*)	(*j*)	(*k*)	
Rates	27	..	22	..	..	..	49
Charges for services and sales of products	14,538	2,392	1,621	471	355	543	19,921
Other (including grants)	98	56	33	86	..	..	273
Total, other	*14,663*	*2,448*	*1,677*	*557*	*355*	*543*	*20,243*
Grand total	**241,348**	**50,884**	**69,341**	**2,174**	**3,295**	**6,226**	**373,267**
EXPENDITURE (EXCLUDING LOAN EXPENDITURE)							
Water supply and sewerage—							
Working expenses	6,549	467	7,320	1	214	2,760	17,311
Depreciation	(*l*)−353	56	..	..	..	..	−298
Debt charges	6,118	137	6,452	..	127	2,554	15,388
Other (including transfers to general revenue and construction)	..	3	3,683	..	..	61	3,747
Total, water supply, etc.	*12,313*	*663*	*17,454*	*1*	*342*	*5,375*	*36,148*
Electricity and gas—							
Working expenses	170,471	43,789	25,561	1,169	1,803	..	242,793
Depreciation	3,401	1,432	..	..	372	..	5,205
Debt charges	25,864	1,720	7,457	305	449	..	35,794
Other (including transfers to general revenue and construction)	..	704	3,472	262	..	..	4,439
Total, electricity, etc.	*199,736*	*47,645*	*36,491*	*1,736*	*2,623*	..	*288,231*
Railways, tramways and omnibuses—							
Working expenses	..	..	8,265	..	..	..	8,265
Debt charges	..	..	1,057	..	..	..	1,057
Other (including transfers to general revenue and construction)	..	..	223	..	..	..	223
Total, railways, etc.	..	..	*9,545*	..	..	..	*9,545*
Other—	(*f*)	(*g*)	(*h*)	(*i*)	(*j*)	(*k*)	
Working expenses	13,319	2,069	674	561	263	408	17,295
Depreciation	142	105	..	..	..	..	247
Debt charges	955	229	109	..	..	72	1,366
Other (including transfers to general revenue and construction)	..	251	676	..	..	1	928
Total, other	*14,417*	*2,655*	*1,460*	*561*	*263*	*481*	*19,836*
Grand total	**226,466**	**50,963**	**64,950**	**2,297**	**3,227**	**5,856**	**353,760**

(*a*) Year ended 31 December 1965. (*b*) Year ended 30 September 1967. (*c*) Year ended 30 June 1967. (*d*) Includes Sewerage and Cleansing Rates. (*e*) Includes Government grant: water supply and sewerage, $2,165,000; electricity and gas, $1,619,000; for part of cost of new works borne by Government. (*f*) Abattoirs. (*g*) Abattoirs, hydraulic power undertakings, quarries, iceworks, and reinforced concrete pipe and culvert works. (*h*) Off-street car parking, municipal markets, hostels, hotels and cinemas. (*i*) Quarries and hospitals. (*j*) Quarries, canteens and abattoirs. (*k*) Abattoirs. (*l*) Net balance after deducting charge for debt redemptions. The full amount of charge for debt redemption is included under debt charges.

LOCAL GOVERNMENT AUTHORITIES: BUSINESS UNDERTAKINGS—REVENUE AND EXPENDITURE, STATES, 1962–63 TO 1966–67
($'000)

Year	N.S.W. (a)	Vic. (b)	Qld (c)	S.A. (c)	W.A. (c)	Tas. (c)	Total
Revenue(d)—							
1962–63 . .	194,460	38,305	44,573	1,505	2,028	3,969	284,840
1963–64 . .	212,020	40,067	53,105	1,889	2,327	4,314	313,722
1964–65 . .	226,234	45,352	58,500	1,621	2,364	5,320	339,392
1965–66 . .	241,348	47,604	64,035	1,852	2,825	5,578	363,242
1966–67 . .	(e)	50,884	69,341	2,174	3,295	6,226	(e)
Expenditure(d)—							
1962–63 . .	183,801	37,982	41,631	1,539	1,957	3,823	270,733
1963–64 . .	199,171	39,883	50,167	1,745	2,142	4,372	297,481
1964–65 . .	210,052	45,117	54,816	1,682	2,318	4,898	318,883
1965–66 . .	226,466	47,962	61,193	1,806	2,773	5,500	345,700
1966–67 . .	(e)	50,963	64,950	2,297	3,227	5,856	(e)

(a) Years ended previous 31 December. (b) Years ended 30 September. (c) Years ended 30 June. (d) Excludes loan receipts or expenditure. (e) Not yet available.

Loan expenditure. The tables following show particulars of loan expenditure on works connected with the ordinary services and the business undertakings of local government authorities.

LOCAL GOVERNMENT AUTHORITIES: LOAN EXPENDITURE, STATES
1966–67

($'000)

	N.S.W. (a)	Vic. (b)	Qld (c)	S.A. (c)	W.A. (c)	Tas. (c)	Total
Ordinary services—							
Roads, bridges, streets, footpaths, drainage, and sewerage	11,673	(b)14,892	25,021	6,707	2,097	2,221	62,611
Council properties . . .	(d)9,206	(d)5,808	(d)5,273	2,081	(d)3,544	(d)927	35,873
Parks, gardens, and recreational reserves	2,672	3,196		602	1,977	586	
Other	(e)2,267	1,521	1,464	10	266	155	5,683
Total, ordinary services .	*25,817*	*25,417*	*31,757*	*9,400*	*7,884*	*3,890*	*104,167*
Business undertakings—							
Water supply	6,698	250	12,866	..	98	1,595	21,507
Sewerage	4,008	..	..	..	..	2,529	6,537
Electricity and gas . . .	28,622	3,148	4,434	60	667	..	36,930
Railways, tramways and omnibuses	..	..	1,018	..	..	..	1,018
Abattoirs	2,383	591	..	..	..	76	3,051
Other	..	24	41	..	..	..	65
Total, business undertakings .	*41,711*	*4,013*	*18,359*	*60*	*765*	*4,201*	*69,108*
Grand total . . .	**67,528**	**29,430**	**50,117**	**9,460**	**8,650**	**8,091**	**173,275**

(a) Year ended 31 December 1965. (b) Year ended 30 September 1967. Figures for Victoria now include transactions of Private Street Accounts. (c) Year ended 30 June 1967. (d) Includes plant. (e) Includes advances for homes.

LOCAL GOVERNMENT AUTHORITIES: LOAN EXPENDITURE STATES, 1962–63 TO 1966–67

($'000)

Year	*N.S.W.* (*a*)	*Vic.* (*b*)	*Qld* (*c*)	*S.A.* (*c*)	*W.A.* (*c*)(*d*)	*Tas.* (*c*)	*Total*
Ordinary services—							
1962–63 .	19,856	17,546	25,974	4,977	6,749	3,862	78,963
1963–64 .	22,725	21,056	32,426	5,383	5,576	4,289	91,455
1964–65 .	25,645	22,052	30,900	5,692	5,849	3,453	93,590
1965–66 .	25,817	24,280	30,959	6,219	7,143	3,655	98,073
1966–67 .	(*e*)	25,417	31,757	9,400	7,884	3,890	(*e*)
Business undertakings—							
1962–63 .	36,988	3,665	10,927	114	683	3,350	55,727
1963–64 .	34,142	3,513	12,434	94	622	3,142	53,948
1964–65 .	36,697	3,508	15,042	22	977	2,900	59,146
1965–66 .	41,711	3,570	16,365	20	903	4,687	67,256
1966–67 .	(*e*)	4,013	18,359	60	765	4,201	(*e*)

(*a*) Years ended previous 31 December. (*b*) Years ended 30 September. Figures for Victoria now include transactions of Private Street Accounts. (*c*) Years ended 30 June. (*d*) Revised. (*e*) Not yet available.

Local government and semi-governmental authorities' debt

Statistics of local government and semi-governmental debt for 1962–63 to 1966-67 are given in the following paragraphs. The information covers all local government authorities (including New South Wales County Councils previously included with semi-governmental authorities) and those semi-governmental authorities responsible for the provision of the following services.

New South Wales. Water Supply, Sewerage and Drainage, Electricity and Gas Supply, Fire Brigades, Banking, Housing, Harbours, Grain Elevators, Roads and Bridges, Marketing, Industry Assistance, General Works, and Miscellaneous.

Victoria. Water Supply and Sewerage, Irrigation and Drainage, Harbours, Transport, Electricity and Gas Supply, Fire Brigades, Marketing (Buying and Selling), Industry Assistance, Grain Elevators, and Housing.

Queensland. Water Supply and Sewerage, Irrigation and Drainage, Harbours, Transport, Electricity Supply, Fire Brigades, University, Hospitals and Ambulances, Marketing (Buying and Selling and Agency), and Industry Assistance.

South Australia. Irrigation and Drainage, Transport, Electricity Supply, Fire Brigades, Hospitals and Ambulances, Marketing (Agency), Industry Assistance, Banking, Housing, University and Miscellaneous.

Western Australia. Water Supply and Sewerage, Harbours, Transport, Electricity Supply, Fire Brigades, Hospitals, Marketing (Agency), Housing, University, and Miscellaneous.

Tasmania. Harbours, Electricity Supply, Fire Brigades, Transport, Housing, and Water Supply. A detailed list of the authorities included is shown in *State, Territory and Local Government Authorities' Finance and Government Securities*, Bulletin No. 6, 1967–68.

The following table provides a summary of new money loan raisings, provisions for debt redemption, debt outstanding and interest payable by local government and semi-governmental authorities for the year 1966–67. For greater detail *see State, Territory and Local Government Authorities' Finance and Government Securities.*

LOCAL GOVERNMENT AND SEMI-GOVERNMENTAL AUTHORITIES: NEW MONEY LOAN RAISINGS, REDEMPTION, DEBT, AND INTEREST PAYABLE, STATES

1966-67

($'000)

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
LOCAL GOVERNMENT AUTHORITIES							
New money loan raisings—							
From government	283	279	2,361	2,291	..	21	5,236
From public	67,542	28,926	38,285	6,981	8,927	6,950	157,610
Total loan raisings	*67,825*	*29,205*	*40,646*	*9,272*	*8,927*	*6,971*	*162,845*
Funds provided for redemption—							
Government loans	835	173	1,716	1,101	3	91	3,919
Loans due to public	30,078	12,715	15,556	1,817	4,177	2,094	66,437
Total funds, redemptions	*30,913*	*12,888*	*17,272*	*2,917*	*4,180*	*2,185*	*70,355*
Accumulated sinking fund balance	36,889	11,152	24,342	107	143	1,120	73,753
Debt—							
Due to government	7,288	7,297	35,416	7,368	64	907	58,340
Due to banks (net overdraft)	5,682	3,434	..	..	110	..	9,226
Due to public creditor(*a*)	571,182	179,031	320,099	36,350	52,763	51,976	1,211,401
Total debt(a)	*584,151*	*189,762*	*355,515*	*43,718*	*52,937*	*52,883*	*1,278,967*
Maturing overseas(*a*)(*b*)	..	..	4,329	..	..	..	4,329
Annual interest payable(*a*)	(*c*)	10,226	19,187	2,305	2,899	2,884	(*c*)
SEMI-GOVERNMENTAL AND OTHER PUBLIC AUTHORITIES							
New money loan raisings—							
From government	32,680	43,763	1,546	27,465	16,541	21,131	143,126
From public	55,681	101,210	33,926	12,536	12,338	4,800	220,492
Total loan raisings	*88,361*	*144,973*	*35,472*	*40,001*	*28,879*	*25,931*	*363,618*
Funds provided for redemption—							
Government loans	7,567	6,236	1,507	3,720	2,953	2,774	24,756
Loans due to public	13,966	16,088	8,986	289	2,314	1,439	43,082
Total funds, redemptions	*21,532*	*22,323*	*10,493*	*4,010*	*5,267*	*4,213*	*67,839*
Accumulated sinking fund balance	98,718	47,132	21,124	2,634	8,365	3,782	181,755
Debt—							
Due to government	543,325	674,191	57,132	386,408	248,293	282,452	2,191,800
Due to banks (net overdraft)	4,915	767	..	245	1,535	..	7,463
Due to public creditor(*a*)	614,565	1,489,590	292,153	137,267	90,062	56,381	2,680,017
Total debt(a)	*1,162,806*	*2,164,548*	*349,284*	*523,919*	*339,890*	*338,833*	*4,879,279*
Maturing overseas(*a*)(*b*)	5,000	6,810	..	..	..	..	11,810
Annual interest payable(*a*)	(*c*)	107,325	18,489	24,914	15,552	16,672	(*c*)

(*a*) Includes debt or interest payable in London and New York. Debt in London is payable in £ sterling which have been converted at the I.M.F. rate of £Stg1 to $A2.50; New York debt is payable in U.S. dollars which have been converted at the I.M.F. rate of $US1.12 to $A1. (*b*) Included in debt figures above. (*c*) Not yet available.

NOTE. The considerable changes in the figures for New South Wales in the table above when compared with figures published in Official Year Books prior to No. 54 (1968) are due to the transfer of New South Wales County Councils from the semi-governmental division to that of local government authorities (*see* previous page).

In the table above and the following table debt includes all liabilities for which arrangements have been made for repayment over a period of one year or more, and net overdrafts. Interest capitalised and amounts due for the capital cost of assets or for services rendered which are to be repaid over a period of one year or more are included. Current liabilities, such as interest accrued (but not capitalised), trade creditors, amounts held in trust, and other debts which are to be repaid in less than one year are not included. Net overdraft is the gross overdraft of all funds less all bank credit balances (including fixed deposits) which do not form part of a sinking fund to repay a loan. New loans raised during the year include new loan liabilities incurred during the year, loans raised from the public to repay indebtedness to the Government, and interest capitalised. Loans raised and redeemed within the year, increases in overdrafts, and loans raised for conversion or redemption of existing debt are excluded. Funds provided for redemption include instalments of principal repaid and amounts credited to sinking funds established for the purpose of repaying the debt on maturity. Amounts provided for redemption from loans raised for that purpose are excluded.

LOCAL GOVERNMENT AND SEMI-GOVERNMENTAL AUTHORITIES: NEW MONEY LOAN RAISINGS, REDEMPTION AND DEBT, AUSTRALIA, 1962–63 TO 1966–67

($'000)

	1962–63	*1963–64*	*1964–65*	*1965–66*	*1966–67*
LOCAL GOVERNMENT AUTHORITIES					
New money loan raisings—					
From government	5,588	6,865	3,945	6,412	5,236
From public	131,451	137,652	136,762	136,148	157,610
Total loan raisings	*137,040*	*144,517*	*140,708*	*142,560*	*162,845*
Funds provided for redemption—					
Government loans	4,646	4,812	4,278	4,281	3,919
Loans due to public	44,483	49,105	56,186	59,033	66,437
Total funds, redemptions	*49,129*	*53,917*	*60,464*	*63,314*	*70,355*
Accumulated sinking fund balance	57,482	58,676	59,496	65,226	73,753
Debt—					
Due to government	53,694	55,783	55,301	57,342	58,340
Due to banks (net overdraft)	6,825	2,678	4,245	7,090	9,226
Due to public creditor(*a*)	865,390	950,513	1,031,619	1,114,762	1,211,401
Total debt(*a*)	*925,909*	*1,008,974*	*1,091,166*	*1,179,194*	*1,278,967*
Maturing overseas(*a*)(*b*)	15,757	15,400	10,043	9,686	4,329
SEMI-GOVERNMENTAL AND OTHER PUBLIC AUTHORITIES					
New money loan raisings—					
From government	130,564	147,374	141,998	140,543	143,126
From public	190,761	191,275	197,872	194,588	220,492
Total loan raisings	*321,325*	*338,649*	*339,870*	*335,132*	*363,618*
Funds provided for redemption—					
Government loans	16,467	18,324	20,206	23,294	24,756
Loans due to public	36,602	33,645	40,006	42,395	43,082
Total funds, redemptions	*53,069*	*51,969*	*60,212*	*65,689*	*67,839*
Accumulated sinking fund balance	118,564	131,631	144,991	162,888	181,755
Debt—					
Due to government	1,694,147	1,823,461	1,945,764	2,072,763	2,191,800
Due to banks (net overdraft)	2,233	1,318	1,125	652	7,463
Due to public creditor(*a*)	1,963,588	2,139,922	2,311,699	2,481,444	2,680,017
Total debt(*a*)	*3,659,968*	*3,964,700*	*4,258,588*	*4,554,859*	*4,879,279*
Maturing overseas(*a*)(*b*)	15,744	15,722	14,718	12,858	11,810

(*a*) *See* footnote (*a*) page 783. (*b*) Included in debt figures above.

Roads and bridges

Commonwealth Government grants

The following table shows the allocations to the States under the several Commonwealth Aid Roads Acts for road construction, maintenance, repair and other works connected with transport for each of the years 1964–65 to 1968–69. After 1 July 1959, when the *Commonwealth Aid Roads Act* 1959 came into operation, the Commonwealth made separate provision for expenditure on strategic roads and the promotion of road safety practices. *See also* the chapter Public Finance, and Finance bulletins.

ROAD CONSTRUCTION, MAINTENANCE, ETC.: GRANTS UNDER THE COMMONWEALTH AID ROADS ACTS, STATES, 1963-64 TO 1967-68

($'000)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
1964–65 . .	36,346	25,576	23,670	14,902	23,006	6,500	130,000
1965–66 . .	39,191	27,508	25,538	16,024	24,739	7,000	140,000
1966–67 . .	41,744	29,443	27,415	17,222	26,676	7,500	150,000
1967–68 . .	44,467	31,286	29,266	18,384	28,597	8,000	160,000
1968–69 . .	47,319	33,113	31,098	19,433	30,537	8,500	170,000

New South Wales

Main roads administration is organised as a separate department under the control of a Commissioner. The activities of the Department of Main Roads include works on main, developmental, secondary and tourist roads throughout the State, all roads in the unincorporated portion of the Western Division, and certain associated works, principally bridges and vehicular ferries, constructed and maintained from government funds. The Department of Main Roads co-operates with the municipal and shire councils in the work of constructing and maintaining the main roads system. Public roads may be proclaimed (*see* page 406) by the Governor as main roads on the recommendation of the Commissioner for Main Roads.

In the County of Cumberland, which for the purposes of the Main Roads Act is deemed to include the City of Blue Mountains and small sections of other councils' areas on the boundary of the County of Cumberland, the full cost of main road and bridge construction, half the cost of secondary roads, and a proportion (in general, up to half) of the cost of tourist roads are met from the funds of the Department of Main Roads. The Councils do not contribute directly to the cost of these works but are required to pay a levy of 0.2083 cents in the $ on the unimproved capital value of rateable property within Council's area or at a uniform percentage determined annually by the Commissioner of between ten per cent and fifteen per cent of Council's total rate income, whichever is the less. In the former case the rate payable in respect of lands used principally for primary production is half the rate levied on other lands.

In country districts the Department meets the full cost of road and bridge works on State highways, the full cost of bridge construction works and three-quarters of the cost of road construction and road and bridge maintenance works on trunk roads, three-quarters of the cost of bridge construction works and two-thirds of the cost of road construction and road and bridge maintenance works on ordinary main roads, and, in most cases, up to half the cost of works on tourist roads. The cost of constructing developmental roads and works is borne in full by the Department of Main Roads, but local Councils are required to maintain them in a satisfactory condition. In December 1965 a toll work comprising the first stage (5.8 miles from the Hawkesbury River to Mount White) of the proposed Sydney to Newcastle Expressway was opened for traffic. In October 1966 the toll work was extended to Calga (a further 3.4 miles). A second toll work (5.3 miles) south from the Hawkesbury River was opened for traffic in December 1968. Tolls imposed on vehicles using the toll works will be used to cover the costs of construction and maintenance work.

Length of roads. The *total length of proclaimed roads* (*see* page 406) in New South Wales at 30 June 1968 was 25,508 miles classified as: Expressways, 21 miles; State highways, 6,542 miles; trunk roads, 4,228 miles; ordinary main roads, 11,593 miles; secondary roads, 159 miles; developmental roads, 2,747 miles; and tourist roads, 218 miles. The length of main roads (expressways, highways, trunk and ordinary main roads) maintained by the Department of Main Roads at 30 June 1968 was 6,233 miles (28 per cent) while the length maintained by Councils was 16,151 miles (72 per cent). These figures exclude secondary, developmental and tourist roads, and unclassified roads in the Western Division of the State. In the area outside the County of Cumberland (the metropolis and adjoining areas) the proportions of main roads maintained by the Department and Councils respectively were: State highways and expressways 79 per cent, 21 per cent; and trunk and ordinary main roads, 4 per cent, 96 per cent. Unclassified roads in the Western Division of the State, totalling 1,530 miles, were maintained by the Department, while developmental roads, (mainly outside the County of Cumberland), totalling 2,747 miles, were maintained by Councils. In the County of Cumberland the proportions of main roads maintained by the Department and Councils respectively were: State highways, 99 per cent, 1 per cent; and ordinary main roads, 56 per cent, 44 per cent. Secondary roads totalling 159 miles were maintained by Councils. Of the 218 miles of tourist roads throughout the State 198 miles (91 per cent) were maintained by Councils and 20 miles (9 per cent) by the Department. In 1966 the *total length of all roads* in New South Wales was estimated at 131,330 miles. The lengths of roads, according to their surfaces, were as follows: bitumen or concrete, 28,621 miles; gravel or stone, 44,668 miles; formed only, 26,947 miles; cleared only, 31,094 miles.

Department of Main Roads—operations. Progress has continued with the implementation of the Department's plan for main roads development in the County of Cumberland. Most of the Department's proposals have been incorporated in the County of Cumberland Planning Scheme approved by Parliament under the Local Government (Amendment) Act, 1951. The Department's proposals for the development of the main roads system in Newcastle and the surrounding districts have been largely incorporated in the Northumberland County District Planning Scheme, and some sections of the system have been constructed. With some modifications, the Department's proposals for the planning of the main roads in the Wollongong-Port Kembla district have been incorporated in the planning scheme prepared by the Illawarra Planning Authority. The Commissioner for Main Roads is a member of the State Planning Authority which was established in June 1964 to co-ordinate these and other planning schemes throughout the State.

During 1967–68, 67 new bridges, including 16 major bridges, were constructed. In addition, 126 concrete box culverts each having a waterway width of twenty feet or more were completed. At 30 June 1968 there were 61 bridges (including 22 major bridges) and 52 concrete box culverts under construction.

Department of Main Roads—revenue and expenditure. The funds of the Department of Main Roads are derived principally from motor vehicle taxation, charges on heavy commercial goods vehicles under the Road Maintenance (Contribution) Act, 1958–1965, grants under Commonwealth Aid Roads Act (*see* page 785 and the chapter Public Finance), other grants from the State or Commonwealth Governments, and proceeds of a levy on municipal and shire councils in the County of Cumberland in accordance with the Main Roads Act, 1924–1965. The State Government also makes repayable advances for Main Roads Department works, and since 1963 the Commissioner for Main Roads has had the power (with the approval of the Governor on the recommendation of the Treasurer) to borrow moneys.

DEPARTMENT OF MAIN ROADS, NEW SOUTH WALES: REVENUE AND EXPENDITURE, 1963-64 TO 1967-68

($'000)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
REVENUE(*a*)					
Motor vehicle taxation, registration and licence fees	38,682	41,059	42,471	42,897	45,248
Commonwealth Aid Roads Acts	20,617	22,934	24,648	26,313	28,013
State and Commonwealth grants	197	70	35	63	. .
Contributions by other departments and bodies	326	97	377	893	846
Local authorities' contributions—					
Under Section 11 of Main Roads Act	5,273	5,768	6,418	7,600	8,241
Other	490	91	157	250	385
Sydney–Newcastle Expressway Toll	. .	. .	356	706	892
Other	343	531	539	564	652
Total	**65,929**	**70,549**	**75,001**	**79,285**	**84,278**
EXPENDITURE(*b*)					
Roads and bridges—					
Construction	48,199	56,153	61,714	62,590	64,534
Maintenance	16,209	16,514	15,813	17,677	17,352
Administration	2,820	3,425	3,757	4,296	4,816
Interest, exchange, etc., on debt	986	1,237	1,609	1,856	2,094
Other(*c*)	1,376	1,125	1,467	1,753	1,705
Total	**69,589**	**78,454**	**84,360**	**88,172**	**90,501**

(*a*) Excludes repayable advances by the State Government and private loans ($4,020,000 in 1963–64, $7,500,000 in 1964–65, $5,005,000 in 1965–66, $6,500,000 in 1966–67 and $8,750,000 in 1967–68), and transfers from Sydney Harbour Bridge Account for Expressway construction ($3,078,000 in 1963–64, $2,360,000 in 1964–65, $4,750,000 in 1965–66, $3,743,241 in 1966–67 and $4,775,000 in 1967–68). Expenditure from these amounts is fully reflected in Expenditure. (*b*) Excludes debt redemption ($123,992 in 1963–64, $209,588 in 1964–65, $441,368 in 1965–66, $346,449 in 1966–67 and $477,430 in 1967–68) and repayment of government advances ($120,000 in 1963–64 $1,020,000 in 1964–65, and $200,000 in 1965–66 and later years). (*c*) Mainly purchase of assets not subject to annual depreciation charge. The purchase of other assets is omitted here because the depreciation charge for them is reflected each year in 'Roads and bridges'.

Figures shown on page 786 represent the aggregate revenue and expenditure of five funds: the County of Cumberland Main Roads General and Special Purposes Funds, the Country Main Roads General and Special Purposes Funds, and the Developmental Roads Fund.

Sydney Harbour Bridge. The Sydney Harbour Bridge was opened for traffic on 19 March 1932. The main span is 1,650 feet and clearance for shipping 170 feet from high water level. The deck, 160 feet wide, carries a roadway of eight traffic lanes and two railway tracks, and there is also a footway on each side. The capital cost of the bridge and associated roadways to 30 June 1968 was $33,194,000, but this amount will be reduced slightly on completion of the disposal of the remaining surplus resumed property. The portion met from repayable loan funds, $29,863,000, is repayable from toll income. Income for 1967–68 amounted to $4,444,000, including road tolls, $4,011,000; railway passenger tolls, $287,000; and omnibus passenger tolls, $27,000. Expenditure amounted to $3,323,000, including interest, exchange, flotation expenses, etc., $1,310,000; sinking fund, $585,000; maintenance, $571,000. The accumulated surpluses of the Bridge Account have been used to finance conversion of tram tracks to roadway on, and the construction of expressway-type approaches to, the bridge. From 1957–58 to 1967–68 a total of $2,011,000 was expended on tram track conversion and $30,767,000 on the bridge expressway-type approaches. The account showed a deficiency of $1,944,000 at 30 June 1968. During 1967–68, 39,572,876 road vehicles (excluding omnibuses and exempt vehicles), 25,977,097 rail travellers and 12,444,518 omnibus travellers crossed the bridge, contributing respectively 92 per cent, 7 per cent, and 1 per cent of the total toll revenue.

Victoria

With the object of improving the main roads of the State, the Country Roads Board was established by legislation passed in 1912. The principal duties of the Board are to determine which roads should be declared in the various classifications; to supervise the construction, reconstruction and maintenance of these roads; to inquire into the State's resources in road materials and the most effective methods of road construction and maintenance; and to recommend deviations in existing roads or the construction of new roads in order to facilitate communications or to improve the conditions of traffic.

Length of roads. The total length of *declared roads* (*see* page 406) by the Country Roads Board in Victoria at 30 June 1968 was 14,541 miles, classified as follows: State highways, 4,460 miles; main roads, 9,097 miles; by-pass roads, 40 miles; tourist roads, 483 miles; forest roads, 461 miles. The length of the surface sealed (bitumen or concrete) included in the foregoing mileage was 12,883 miles or 89 per cent of the total. In addition to the 14,541 miles of classified roads, there were approximately 86,400 miles of unclassified roads at 30 June 1968. The *total length of roads and streets* in Victoria at 30 June 1968 is estimated as: bitumen or concrete, 29,365 miles; gravel or stone, 29,618 miles; formed only, 20,606 miles; cleared only, 21,333 miles; total, 100,922 miles.

Country Roads Board—operations. During 1967–68, 1,829 miles of declared roads under the Board's control were treated with bitumen. In addition, 1,129 miles of undeclared roads, for which the Board contributed funds, were similarly treated. The total length of bitumen treatment carried out in 1967–68 was 3,078 miles (including 120 miles for other authorities). Of the work on the roads under the Board's control in 1967–68, 741 miles related to State highways and by-pass roads. During 1967–68, 154 bridge projects of an estimated total value of $7,470,000 were initiated. Of these, 89, estimated to cost $1,930,000, were under municipal supervision.

Country Roads Board—receipts and payments. The funds of the Country Roads Board are derived principally from motor registration fees, two-thirds of additional registration fees (charged on initial registration or transfer), a proportion of drivers' licence fees, fines, payments by the Commonwealth Government under the Commonwealth Aid Roads Acts, roads charges under the Commercial Goods Vehicles Act, and repayments by municipalities. As from 1 July 1964 proceeds from fines are paid to consolidated revenue, but an equivalent amount to replace them is made available to the Board from the loan fund. In addition, loans have been authorised from time to time under the Country Roads Acts for permanent works on main and developmental roads, State highways, tourists' roads and forest roads, while the State Government has provided, free of repayment, loan moneys for restoration of flood and bush fire damage. During 1967–68 loan receipts and payments each amounted to $987,000. The total loan expenditure to 30 June 1968 was $35,904,650. This figure does not include loan expenditure from the Developmental Roads Loan Account, a fund which was created for the purpose of constructing and maintaining subsidiary or developmental roads. Loan money raised on this account was exhausted at 30 June 1937, the total expenditure at that date being $12,851,516. In 1967–68 $3,145,000 was allocated to the Board for expenditure on certain special road projects. This was part of the revenue raised by the increase in motor registration fees under the *Roads* (*Special Projects*) *Act* 1965.

COUNTRY ROADS BOARD, VICTORIA: RECEIPTS AND PAYMENTS 1963-64 TO 1967-68

($'000)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
RECEIPTS					
Motor Car Act—registration and licence fees (less cost of collection)	23,427	23,378	24,690	25,866	26,784
Municipalities' payments	1,579	1,690	1,691	1,824	1,845
Commonwealth Aid Roads Acts	22,431	25,182	27,175	29,050	30,895
Roads (Special Projects) Fund	. .	. .	1,654	3,311	2,652
Loans from State Government	666	762	1,020	834	987
Road charges, Commercial Goods Vehicles Act	5,638	5,926	6,379	6,732	7,248
Public Works Loan Application Act	. .	700	768	715	700
Other	223	889	971	464	402
Total	**53,964**	**58,527**	**64,348**	**68,796**	**71,513**
PAYMENTS					
Construction and maintenance of roads and bridges—					
State highways	19,151	17,081	17,704	19,674	19,003
Main roads	14,889	15,189	16,569	16,765	16,769
By-pass roads	2,641	4,854	3,745	5,172	7,969
Tourist roads	1,425	1,422	1,510	2,312	2,857
Forest roads	742	714	699	737	658
Unclassified roads	10,107	11,131	12,709	12,798	13,739
Other	87	167	140	45	82
Plant purchase	1,193	697	1,149	1,388	1,234
Interest, debt redemption, etc.	1,950	1,988	2,056	2,140	2,190
Office building, Kew—capital cost	378	71	12	31	8
Statutory payment to—					
Tourists' Resorts Fund	427	469	468	494	517
Transport Regulation Board	. .	. .	178	383	404
Administration and other	3,769	4,744	6,339	5,637	7,011
Total	**56,758**	**58,525**	**63,278**	**67,575**	**72,443**

Melbourne and Metropolitan Board of Works. Since assuming responsibility for carrying-out planning scheme proposals relating to metropolitan highways and bridges, a tentative construction programme of urgent highway works throughout the metropolitan area of Melbourne has been adopted. Expenditure on these projects up to 30 June 1968 was $23.6m. Of this amount, $11.5m was financed from the proceeds of the Board's Metropolitan Improvement Rate and $12.1m was contributed by the Treasurer of Victoria from the Roads (Special Projects) Fund.

Level crossings. In 1954–55 the Level Crossings Fund was created under the *Country Roads and Level Crossings Funds' Act* 1954 to finance (*a*) the elimination of level crossings or the provision of alternative routes to enable road traffic to avoid level crossings; (*b*) the provision of lights, signs, and lighting at, and the improvement of approaches to, level crossings; and (*c*) generally, the reduction of danger at level crossings. The Act provides for the payment into the Fund of one-third of all moneys received by way of additional motor registration fees and money provided under any other Act. The amount available for expenditure in 1967–68 was $851,340, consisting entirely of receipts from additional registration fees. Expenditure from the Fund amounted to $824,650, of which $699,154 was incurred by the Railways Department and $125,496 by the Country Roads Board, leaving a balance carried forward of $1,229,814.

Queensland

The Department of Main Roads was constituted in February 1951 with the Commissioner of Main Roads as its permanent head. The duties of the Commissioner are to carry out surveys and investigations necessary to determine State highways, main developmental, and secondary roads;

and the responsibility for building and maintaining these declared roads is largely that of the Commissioner. Roads of purely local importance are constructed and maintained by local authorities. In many cases construction is financed by the State Government by means of Treasury loans. Other roads may be built by the Public Estate Improvement Branch of the Lands Department in order to open up areas of previously inaccessible or undeveloped country.

Length of roads. The total length of *declared roads* (*see* page 406) in Queensland at 30 June 1968 was 24,662 miles; comprising State highways, 6,242 miles; main roads, 5,150 miles; developmental roads, 4,377 miles; and secondary roads, 8,893 miles. By the amendments to the Main Roads Act published in the Government Gazette of 6 April 1959, mining access, farmers' and tourist roads became secondary roads, and the provisions relating to the declaration of tourist tracks were repealed. The *total length of roads and streets* in Queensland at 30 June 1968 was: bitumen or concrete, 18,161 miles; gravel or stone, 18,401 miles; formed only, 41,037 miles; cleared only, 40,758 miles; total, 118,357 miles.

Department of Main Roads—operations. During 1966–67 the Department completed the following mileages of road works: 458 miles of new bitumen; 241 miles reconstructed to bitumen; 220 miles of re-sealed bitumen; 190 miles of gravel road; 102 miles of newly formed road, and 20 miles of gravel road reconstructed. Bridges of all types to a length of 9,129 linear feet were constructed, bringing the total constructed by the Department at 30 June 1967 to 265,988 feet. In addition, at 30 June 1967, 9,531 feet were under construction.

Department of Main Roads—receipts and payments. The funds of the Department of Main Roads are obtained chiefly from motor vehicle registration and collections, fees, etc. under the Transport Acts, contributions under the Commonwealth Aid Roads Acts, and loans, grants and advances from the State Government. The total receipts and payments during each of the years 1962–63 to 1966–67 are shown below.

DEPARTMENT OF MAIN ROADS, QUEENSLAND: RECEIPTS AND PAYMENTS 1962-63 TO 1966-67

($'000)

	1962–63	*1963–64*	*1964–65*	*1965–66*	*1966–67*
RECEIPTS					
Motor vehicle registration, Transport Acts collections, fees, etc.	12,339	13,664	15,531	15,704	18,645
Loans from State Government	1,668	1,046	1,039	1,330	1,127
Grants from State Government	104	260	. .	586	1,785
Roads (Contribution to Maintenance) Act	2,201	2,558	3,027	3,142	3,592
Commonwealth Aid Roads and Works Acts	20,854	24,877	27,919	29,188	31,707
Maintenance repayments—local authorities	1,555	1,586	1,125	1,125	1,192
Hire, rent, sales of plant, etc.	2,966	3,322	3,704	3,449	3,898
Other	1,275	2,126	2,043	2,066	2,755
Total	**42,962**	**49,439**	**54,388**	**56,590**	**64,701**
PAYMENTS					
Permanent road works and surveys(*a*)	28,847	34,345	39,993	35,356	40,141
Maintenance of roads	5,939	6,507	6,466	6,876	8,310
Plant, machinery, buildings, etc. (including plant maintenance)	2,573	3,351	3,735	4,418	3,716
Loans—					
Interest	120	132	203	276	301
Redemption	650	666	697	432	396
Administration and other	4,063	4,828	5,618	7,104	9,000
Total	**42,192**	**49,829**	**56,712**	**54,462**	**61,864**

(*a*) Includes grants to local authorities for road purposes.

South Australia

The Highways and Local Government Department is administered by the Commissioner of Highways, who is empowered, subject to the approval of the Minister of Roads, to undertake the construction, maintenance and protection of the principal roads of the State, allocate grants to councils for roadworks and supervise the expenditure of these grants, and assist Councils to purchase road-making plant and to defray the cost of roadworks. In addition, the Commissioner advises Councils on technical questions concerning the construction, maintenance or repair of roads. Funds of the Department are derived mainly from the Highways Fund, into which are paid the proceeds from motor vehicle registration and drivers' licences (less cost of collection), appropriations from loan funds, repayments of advances made to Councils, and contributions by the Municipal Tramways Trust, and from contributions under the Commonwealth Aid Roads Acts.

Length of roads. In South Australia there are only two classifications of roads. These are main roads proclaimed (*see* page 406) under the provisions of the Highways Act and all other roads, commonly designated district roads. At 30 June 1968 there were 8,156 miles of *proclaimed main roads* and approximately 66,859 miles of district roads, including roads and tracks outside local government areas, totalling 75,015 miles. *Total lengths of roads*, classified by surface, were estimated to be: bitumen or concrete, 8,547 miles; gravel or stone, 16,834 miles; formed only, 9,347 miles; unformed, 40,287 miles.

State Highways and Local Government Department—receipts and payments. The following table shows particulars of receipts and payments, during the years 1963–64 to 1967–68, of funds controlled by the Highways and Local Government Department.

HIGHWAYS AND LOCAL GOVERNMENT DEPARTMENT, SOUTH AUSTRALIA
RECEIPTS AND PAYMENTS, 1963-64 TO 1967-68
($'000)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
RECEIPTS					
Motor vehicles registration, licences, fees	9,981	10,731	11,206	11,506	11,858
Commonwealth Aid Roads Acts	13,337	14,903	16,024	17,223	18,384
Loans from State Government	950	. .	. .	. .	. .
Other(*a*)	1,123	2,696	3,340	3,496	3,693
Total	**25,391**	**28,330**	**30,570**	**32,225**	**33,934**
PAYMENTS					
Construction and reconstruction of roads and bridges(*b*)	19,517	18,409	20,912	22,834	20,799
Maintenance(*a*)(*b*)	5,497	5,198	5,375	6,000	7,128
Recoups to Consolidated Revenue Fund—interest, debt redemption and exchange	512	1,164	1,167	514	518
Advances to local and semi-governmental authorities	1,650	1,126	1,376	1,091	1,386
Repayments to Revenue under Section 31 (a), Highways Act	. .	. .	. .	1,000	240
Stores, plant, machinery, suspense accounts, etc.(*c*)	538	919	1,214	1,792	2,866
Total	**27,715**	**26,816**	**30,044**	**33,231**	**32,936**

(*a*) Includes reimbursement works for Commonwealth Government. (*b*) Includes administration expenses. (*c*) Represents gross repayments less recoveries by charges to works on account of depreciation and materials used.

Western Australia

Work connected with road construction and maintenance and associated projects in Western Australia is undertaken by the State Government, through the Main Roads Department, and by local government authorities throughout the State. The Department operates under the *Main Roads Act, 1930–1967*, and is administered by a Commissioner of Main Roads responsible to the Minister for Works. The Act makes provision for public roads in the categories of main roads, controlled-access roads and developmental roads (*see* page 406). An additional category, that of important secondary roads, is used by the Department in determining its works programme. Within its own district each local government authority is responsible for the provision and upkeep of roads other than those provided by the Main Roads Department. In addition, the local authority is required by the Main Roads Act to maintain any developmental road situated in its district.

Length of roads. The *total length of constructed roads for which financial provision was made by the Main Roads Department* at 30 June 1967 was: main roads, 3,435 miles, including seven miles of controlled-access roads; important secondary roads, 7,958 miles; and developmental roads, 43,930 miles. In addition, there were 74 miles gazetted as controlled-access roadway as yet not constructed. The *total length of roads and streets* in Western Australia at 30 June 1967 was made up as follows: bitumen or concrete, 13,806 miles; gravel or stone, 23,193 miles; formed only, 45,746 miles; cleared only, 26,362 miles; total, 109,107 miles.

Main Roads Department—operations. During the year 1966–67 the activities of the Department included clearing, 2,393 miles; forming, 3,697 miles; gravelling, 2,334 miles; reconditioning, 6,421 miles; and stabilising, 58 miles. In addition, 1,464 miles were primed or sealed (including widening). New and replacement bridges constructed totalled 43, while 13 bridges were widened.

Main Roads Department—receipts and payments. The funds of the Main Roads Department are derived principally from allocations made under the *Commonwealth Aid Roads Act* 1964. In addition, special Commonwealth assistance is given for the improvement of roads used for the transport of beef cattle in the Kimberley District. For the six-year period ended 30 June 1967 additional grants totalling $8,400,000 were received from Commonwealth funds and were matched by a corresponding State contribution. In a further seven year period to 30 June 1974 an additional maximum amount of $9,500,000 is to be allocated, including $1,400,000 received in 1967–68. Other sources of income include overload permit fees, one-half of the net amount of traffic fees collected in the Metropolitan Traffic Area, and an allocation from drivers' licence fees. Further moneys for expenditure on road maintenance are available under the *Road Maintenance* (*Contribution*) *Act* 1965, administered by the Commissioner of Transport. (Outside the Metropolitan Traffic Area motor vehicle licence fees are collected and retained by the local authorities with the provision that from 1 January 1965 they are required to contribute to the Central Road Trust Fund the amount of their annual vehicle licence collections which exceeds that of the base year 1958–59. Such amount is reimbursed together with an addition of 75 per cent from Commonwealth matching grants.) Receipts and payments for the years 1963–64 to 1967–68 are shown in the following table.

MAIN ROADS DEPARTMENT, WESTERN AUSTRALIA: RECEIPTS AND PAYMENTS, 1963-64 TO 1967-68

($'000)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
	RECEIPTS				
Motor vehicle registration, licence fees, etc.	2,335	3,370	4,054	3,820	3,868
Commonwealth Aid Roads Acts . .	16,987	21,945	22,618	23,475	24,307
Commonwealth Aid Roads Acts—matching grants	2,460	..	463	763	1,202
Western Australia Grant (Beef Cattle Roads) Act(*a*)	1,500	1,500	1,500	1,500	1,400
Road Maintenance (Contribution) Act .	..	..	392	2,540	2,873
Recoups from other authorities . .	1,124	1,455	917	1,821	1,469
Other	71	52	(*b*)2,024	176	272
Total	(*c*)24,477	28,322	31,968	34,095	35,391

For footnotes *see* next page.

MAIN ROADS DEPARTMENT, WESTERN AUSTRALIA: RECEIPTS AND PAYMENTS, 1963–64 TO 1967–68—*continued*

($'000)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
			PAYMENTS		
Construction and reconstruction of roads and bridges(*d*)	13,872	18,110	21,012	26,009	24,846
Maintenance of roads and bridges(*d*)	2,561	2,196	1,856	3,010	3,294
Grants to local authorities, etc.	2,940	2,939	3,501	3,518	4,307
Transfer to State Consolidated Revenue	140	195	253	258	258
Plant, machinery, etc.	1,146	1,587	1,709	1,789	2,046
Other(*d*)	1,405	1,530	1,861	1,678	1,642
Total	**(*e*)22,064**	**(*f*)26,557**	**30,192**	**36,262**	**36,393**

(*a*) For 1967–68 the funds are derived from the *State Grants (Beef Cattle Roads) Act* 1968. (*b*) Includes $1,896,000 transferred from an Overhaul Account previously administered by the Public Works Department. (*c*) Excludes $1,000,000 advance from State Treasury. (*d*) Includes administration and expenditure on hire and maintenance of road construction plant, etc., and on purchase of materials. (*e*) Excludes $1,400,000 refund of advance from State Treasury. (*f*) Excludes $1,000,000 refund of advance from State Treasury.

Tasmania

Under the *Road Construction (Transfer of Functions) Act* 1951, which came into operation on 1 July 1951, the control of the construction and maintenance of roads and certain road making plant was vested in the Minister for Lands and Works. Works authorised by the Minister in respect of roads classified as State highways, tourist and developmental roads are constructed by the Department of Public Works and financed from the State Highways Trust Fund, into which are paid the proceeds from Commonwealth Aid Roads grants, motor vehicle registration fees and taxes, licence fees for drivers and public transport, and other moneys made available by Parliament. In addition, provision was made under the Road Construction (Transfer of Functions) Act for certain works authorised by the Transport Commission to be carried out and constructed by the Department. The expenditure by the Public Works Department during 1967–68 on the construction and maintenance of roads, tracks and bridges amounted to $13,051,197 of which $11,741,413 was charged to road funds, $28,402 to revenue, $1,200,455 to loan, and $80,927 to other funds. Except in special cases, municipal councils bear the cost of maintaining country roads and a proportion of the cost of main and secondary roads.

Length of roads. The length of *classified roads* (*see* page 406) at 30 June 1968 was 2,296 miles, comprising State highways, 1,206 miles; main roads, 667 miles; secondary roads, 197 miles; tourist roads, 47 miles; and other roads, 179 miles. The mileages of sealed (bitumen or concrete) roads and their proportions to the respective totals were: State highways, 1,008 miles (84 per cent); main roads, 461 miles (69 per cent); secondary, tourist and other roads, 169 miles (40 per cent). The total length of classified sealed roads was 1,638 miles (71 per cent). The total length of local authorities roads at 30 June 1968 was 9,027 miles, comprising bitumen or concrete, 1,677 miles (19 per cent); gravel or stone, 5,955 miles (66 per cent); formed only or cleared only, 1,395 miles (15 per cent). Roads of other authorities (Hydro-Electric Commission, Forestry Commission and the sawmilling industry) totalled 2,089 miles.

The *total length of all roads* in Tasmania at 30 June 1968 was 13,411 miles, comprising bitumen or concrete 3,366 miles (25 per cent); gravel or stone 8,608 miles (64 per cent); formed only or cleared only, 1,437 miles (11 per cent).

Combined road funds—receipts and payments. The table following shows particulars of the receipts and payments of the combined Road Funds for the years 1963–64 to 1967–68.

ROAD FUNDS, TASMANIA: RECEIPTS AND PAYMENTS, 1963-64 TO 1967-68
($'000)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
RECEIPTS					
Motor vehicle taxation and registration, licences, fees, fines, etc.	3,019	3,153	3,425	3,961	4,396
Commonwealth Aid Roads and Works Acts	5,800	6,500	7,000	7,500	8,000
Recoups from local authorities, etc.	14	16	18	38	32
State Loan Fund	4,761	3,468	4,446	1,693	1,188
Hire of plant and workshop charges	3,165	3,329	3,732	3,824	4,170
Other	(*a*)465	(*a*)1,295	220	262	565
Total	**17,224**	**17,761**	**18,842**	**17,279**	**18,350**
PAYMENTS					
Construction and reconstruction of roads and bridges	11,239	11,420	11,591	9,445	10,214
Maintenance of roads and bridges	2,586	2,552	3,141	3,167	3,436
Other works connected with transport	72	76	62	45	48
Grants to local authorities	33	15	35	37	46
Purchase, maintenance and operation of plant	3,231	3,402	3,751	3,884	4,276
Other	220	383	300	759	346
Total	**17,382**	**17,848**	**18,881**	**17,337**	**18,367**

(*a*) Includes Commonwealth Employment Stimulation Grant ($15,302 in 1963–64, and $14,946 in 1964–65).

Summary of roads open for general traffic

The tables showing road lengths in the several States and Territories classified according to class of road and surface of road formerly included in this section have been transferred to Chapter 12, Transport, Communication, and Travel.

Aggregate net expenditure on roads and bridges in Australia

In most States there are three classes of authorities concerned with roads and bridges, the State Government, the central road authority, and numerous local government bodies. The Commonwealth Government, in addition to the grants it makes to the States for road purposes, is concerned with roads in the Northern Territory and the Australian Capital Territory and roads of access to Commonwealth property in the various States. Some information relating to Commonwealth grants to the States for road purposes and particulars of the expenditure on roads and bridges by local government bodies and the central road authorities are given in preceding sections of this chapter.

Most of these authorities may expend money directly on road construction or indirectly by means of grants and payments to other authorities. These indirect payments, if included in an aggregate, would duplicate expenditure; this, together with the fact that some authorities are unable to supply separate information concerning their road expenditure, makes it difficult to compile precise statistics of aggregate expenditure on roads and bridges.

The information in the following table, which is partly estimated and which excludes the main indirect payments, provides an approximate measure of the aggregate net expenditure by the three classes of authorities mentioned above on roads and bridges in Australia during each of the years ended 30 June 1964 to 1968. Expenditure on roads by those authorities whose primary activity is directed towards functions other than roads, e.g. electricity, forestry, housing, etc., authorities, is not included. The figures cover expenditure on the construction, reconstruction and maintenance of roads and bridges, and direct administration but not debt charges. Because of the difficulties associated with the indirect payments mentioned above, it is not possible to give separate net details for each authority.

PUBLIC AUTHORITY NET EXPENDITURE ON ROADS AND BRIDGES
STATES AND TERRITORIES, 1963-64 TO 1967-68
($ million)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T. and A.C.T.*	*Aust.*
1963–64 . .	133	105	65	37	28	18	9	395
1964–65 . .	149	114	71	38	34	17	10	433
1965–66 . .	164	123	71	41	39	21	15	474
1966–67 . .	171	128	79	48	46	20	13	505
1967–68 . .	169	142	91	49	46	20	21	538

Water supply, sewerage and drainage

The information in this section relates primarily to the metropolitan areas and provincial cities and towns. For information on water supply and irrigation in rural areas *see* the chapter Water Conservation and Irrigation.

New South Wales

The two largest domestic water supply and sewerage systems are controlled by statutory boards each consisting of a president and a vice-president appointed by the State Government, and five members elected by local councils. These are (*a*) the Metropolitan Water, Sewerage and Drainage Board, which administers the systems in the County of Cumberland, i.e. in Sydney and in the surrounding districts, and, in addition, has jurisdiction over territory extending along the South Coast beyond Wollongong to Lake Illawarra, Shellharbour and Kiama, and (*b*) the Hunter District Water Board serving the Newcastle-Maitland-Cessnock areas. At Broken Hill and Cobar similar boards include representatives of the mining companies. Other systems, apart from irrigation projects and water storage systems administered by the State Government, are controlled by county, municipal or shire councils.

Metropolitan and Hunter District water supply (*to* 30 *June* 1968). The storage reservoirs of the *metropolitan system* with a combined available capacity of 574,335 million gallons, drain catchment areas of 3,890 square miles (including Warragamba, 3,480 square miles, Upper Nepean, 347 square miles, and Woronora, 29 square miles). The development of a water supply system on the Warraggamba River was completed with the official opening of the Warragamba Dam in October 1960. This dam, constructed in concrete, has a storage capacity of 452,505 million gallons. Its safe net draught is estimated to be 274 million gallons a day. At 30 June 1968 there were 174 service reservoirs in use with a combined capacity of 701 million gallons. Rating for water for 1967–68 was 3.75 cents in the $ of 'assessed annual value'. The payment of the rate entitled the user to an amount of water calculated at 1,000 gallons per 30 cents. For water in excess of this allowance a further charge of 30 cents per 1,000 gallons was made. Fluoridation of the metropolitan water supply commenced in April 1968.

The water supply of the *Hunter District system* is drawn principally from three sources: the Chichester Reservoir, with a storage capacity of about 4,320 million gallons and draining a catchment of 76 square miles, the Tomago Sandbeds, which extend northerly along the coast towards Port Stephens, and the Grahamstown Water Supply Scheme which is still being developed. Another source of supply is provided by the Nelson Bay-Anna Bay Scheme. Service reservoirs and tanks distributed throughout the water supply district have a total storage capacity of 126 million gallons. Water rates were calculated in 1967–68 at the rate of 6.9792 cents in the $ of 'assessed annual value'. The payment of this rate entitled the user to an amount of water calculated at 1,000 gallons per 30 cents. For water in excess of this allowance a further charge of 30 cents per 1,000 gallons was made.

The following tables show, for the Metropolitan and Hunter District systems, the number of properties, the estimated population supplied, and other details.

METROPOLITAN WATER SUPPLY(*a*), NEW SOUTH WALES SERVICES, 1963–64 TO 1967–68

Year	*Improved properties for which water mains available*	*Estimated population supplied*	*Average daily consumption*	*Total consumption for the year*	*Average daily consumption*		*Length of mains*	*Number of meters*
					Per property	*Per head of estimated population*		
		'000	mill gal	mill gal	gallons	gallons	miles	
1963–64 .	669,948	2,600	255	93,211	381	98	7,397	457,215
1964–65 .	693,185	2,660	290	105,892	418	109	7,649	479,321
1965–66 .	712,059	2,723	230	83,802	323	84	7,972	495,850
1966–67 .	735,360	2,756	234	85,383	318	85	8,105	515,653
1967–68 .	756,063	2,816	270	98,981	357	96	8,325	532,859

(*a*) County of Cumberland, City of Greater Wollongong, Shellharbour and Kiama Municipalities, and parts of Colo and Wollondilly Shires.

HUNTER DISTRICT WATER SUPPLY(*a*): SERVICES 1963–64 TO 1967–68

Year	*Properties supplied*	*Estimated population supplied*	*Average daily consumption*	*Total consumption for year*	*Average daily consumption*		*Length of mains*
					Per property	*Per head of estimated population*	
			mill gal	mill gal	gallons	gallons	miles
1963–64 . .	91,616	309,609	36.4	13,336	398	118	1,590
1964–65 . .	93,646	316,625	41.5	15,139	443	131	1,623
1965–66 . .	94,779	320,451	32.8	11,970	346	102	1,673
1966–67 . .	96,755	327,514	31.6	11,521	326	96	1,702
1967–68 . .	99,066	335,565	37.4	13,675	377	111	1,740

(*a*) Newcastle, Maitland and Cessnock areas.

Metropolitan and Hunter District sewerage and drainage system (*to* 30 *June* 1968). The *metropolitan system* serving Sydney and suburbs comprises 3 major sewerage systems and 7 minor systems, consisting of 7 outfalls discharging directly into the Pacific Ocean and 3 treatment works. There are also 8 centres outside the metropolitan area of which 5 (Camden, Campbelltown, St Mary's, Richmond and Warragamba township) are served by local treatment works and 3 (Bellambi, Port Kembla and Wollongong) discharge directly into the Pacific Ocean. Stormwater drainage channels under the control of the Metropolitan Water, Sewerage and Drainage Board at 30 June 1968 were 184 miles long. Sewerage rating for 1967–68 was 3.95 cents in the $ of 'assessed annual value', and drainage rating 0.52 cents in the $.

The main sewerage system of the Hunter District serves the City of Newcastle and discharges into the Pacific Ocean at Burwood Beach. There are also local treatment works at Maitland, Cessnock and some of the outlying districts. Sewerage rates for 1967–68 were 4.7917 cents in the $ of 'assessed annual value', and drainage rates (on certain areas served) 0.5208 cents in the $.

The following table gives details of sewerage services and stormwater drains of the Metropolitan system.

METROPOLITAN SEWERAGE AND DRAINAGE(a) NEW SOUTH WALES: SERVICES, 1964 TO 1968

30 June—	*Improved properties for which sewerage available*	*Estimated population served*	*Length of sewers*	*Length of stormwater channels*
		'000	miles	miles
1964 . . .	475,735	1,870	5,074	180
1965 . . .	501,389	1,930	5,328	179
1966 . . .	524,225	2,000	5,585	181
1967 . . .	547,630	2,052	5,881	182
1968 . . .	574,847	2,135	6,166	184

(a) County of Cumberland, City of Greater Wollongong, Shellharbour and Kiama Municipalities, and parts of Colo and Wollondilly Shires.

At 30 June 1968, 78,276 premises had been connected to the Hunter District Water Board's sewerage system (Newcastle-Maitland-Cessnock areas). The total length of sewers under the Board's control was 1,088 miles, and the length of drains was 52 miles.

Metropolitan and Hunter District systems' finances. The following table shows the debt, revenue and expenditure of the Metropolitan Water, Sewerage and Drainage Board and the Hunter District Water Board for each of the services of water supply, sewerage and drainage during 1967–68, and for the three services combined for the years 1963–64 to 1967–68.

METROPOLITAN AND HUNTER DISTRICT WATER SUPPLY, SEWERAGE AND DRAINAGE, NEW SOUTH WALES: FINANCES, 1963–64 TO 1967–68

($'000)

Year	*Capital debt at 30 June*	*Revenue*	*Expenditure*				*Surplus (+) or deficit (−)*
			Working expenses (a)	*Interest and exchange*	*Debt redemption*	*Total*	
			METROPOLITAN(b)				
1967–68—							
Water . . .	317,276	38,997	17,694	15,186	6,112	38,992	+ 5
Sewerage . . .	224,061	28,436	13,155	10,758	4,521	28,434	+ 2
Drainage . . .	9,456	1,484	916	444	121	1,482	+ 2
Total, 1967–68 . .	**550,793**	**68,917**	**31,765**	**26,389**	**10,754**	**68,908**	**+ 9**
1966–67 . .	513,816	62,701	28,914	24,132	9,635	62,681	+ 20
1965–66 . .	475,200	58,092	27,169	22,166	8,743	58,078	+ 14
1964–65 . .	440,941	54,890	26,846	20,166	7,861	54,873	+ 17
1963–64 . .	407,205	50,860	25,133	18,549	7,145	50,827	+ 33
			HUNTER DISTRICT(c)				
1967–68—							
Water . . .	60,599	5,839	2,476	2,751	600	5,827	+ 12
Sewerage . . .	19,960	2,662	1,536	946	236	2,717	− 55
Drainage . . .	790	150	94	43	8	144	+ 6
Total, 1967–68 . .	**(d)84,698**	**8,651**	**4,106**	**3,740**	**843**	**8,688**	**− 38**
1966–67 . .	(d)79,497	7,928	3,786	3,254	765	7,805	+122
1965–66 . .	(d)74 593	7,804	3,469	3,442	861	7,772	+ 32
1964–65 . .	(d)69,705	6,508	3,099	2,808	701	6,607	− 99
1963–64 . .	(d)64,978	6,205	2,890	2,653	648	6,191	+ 14

(a) Includes provision for renewals, long service leave, etc. (b) County of Cumberland, City of Greater Wollongong, Shellharbour and Kiama Municipalities, and parts of Colo and Wollondilly Shires. (c) Newcastle-Maitland-Cessnock areas. (d) Includes General Fund indebtedness not dissected by services.

Local government country water supply and sewerage systems. At 31 December 1966, country water supply services were conducted or under construction by 48 municipalities, 92 shires and 6 county councils, and country sewerage services by 51 municipalities and 46 shires. The capital indebtedness of these schemes was $103,776,000 at 31 December 1966, namely $69,251,000 for water and $34,525,000 for sewerage. Debt of the municipalities amounted to $50,080,000, shires to $41,200,000, and county councils to $12,496,000. Government advances amounting to $622,000 are included in these figures. Aggregate income and expenditure amounted to $17,702,000 and $13,510,000, respectively, in 1966.

Other country water supply and sewerage systems. The water supply and sewerage services for Broken Hill are operated by a statutory board, the Broken Hill Water Board. Its capital indebtedness at 31 December 1967 was $6,112,000. In 1967, income (excluding subsidies, State Government $198,000 and mining companies $505,000) amounted to $758,000 and expenditure (excluding debt redemption $272,000) amounted to $1,182,000. The Cobar Water Board was constituted in February 1964. At 31 December 1967 its capital indebtedness was $2,391,000. The following country water supply systems—South-West Tablelands, Junee, and Fish River—are administered by the Department of Public Works. These supply water in bulk to municipalities and shires, the Electricity Commission of New South Wales, and other large consumers. Only a small quantity is sold direct to private consumers. The capital indebtedness of these systems was $15,093,000 at 31 December 1967. The Mulwala Water Supply and Sewerage Service was constructed as an urgent war-time work for the Commonwealth, and the Bethungra Water Supply System is administered by the Department of Public Works in conjuction with the Junee supply.

Victoria

Melbourne and Metropolitan Board of Works. The Board consists of a Chairman and fifty-two Commissioners elected to represent the municipalities which lie wholly or partly within the metropolitan area. The principal functions of the Board are: to control and manage the metropolitan water supply system; to provide the metropolitan area with an efficient main and general sewerage system; to deal with main drains and main drainage works; to control and manage the rivers, creeks and watercourses within the metropolitan area; and to carry out the functions of a permanent planning authority.

Metropolitan water supply. There are 6 storage reservoirs serving the metropolitan area—Yan Yean, 7,233 million gallons (available for consumption, 6,649 million gallons); Toorourrong, 60 million gallons; Maroondah, 6,289 million gallons (4,870 million gallons); O'Shannassy, 930 million gallons; Silvan, 8,853 million gallons (8,823 million gallons); and Upper Yarra, 45,400 million gallons (44,120 million gallons); total 68,765 million gallons (65,452 million gallons). Service reservoirs number 47, with a total capacity of 369 million gallons. The water rate levied by the Board in 1967–68 was 2.5 cents in the $ on the net annual value of the properties served. The charge for water consumed in excess of the quantity which, at 20 cents per 1,000 gallons, would equal the assessed water rates on each property, was 20 cents per 1,000 gallons. The following table shows particulars of Melbourne metropolitan water supply services for the years 1963–64 to 1967–68.

MELBOURNE WATER SUPPLY: SERVICES, 1963-64 TO 1967-68

					Average daily consumption			
Year	*Number of houses supplied*	*Estimated population supplied*	*Average daily consumption*	*Total consumption for the year*	*Per house*	*Per head of estimated population*	*Length of aqueducts, etc. mains and reticulation*	*Number of meters*
		'000	mill gal	mill gal	gallons	gallons	miles	
1963–64	572,431	2,021	162.9	59,621	285	80.6	5,882	485,856
1964–65	595,727	2,079	168.2	61,409	282	80.9	6,098	511,077
1965–66	612,844	2,120	178.7	65,218	292	84.2	6,280	536,093
1966–67	626,690	2,143	188.5	68,815	301	88.0	6,517	559,713
1967–68	642,039	2,170	139.0	50,876	216	64.1	6,791	577,713

Metropolitan sewerage and drainage. Particulars of sewerage and drainage services for 1963–64 to 1967–68 are shown on the next page. The rate levied in 1967–68 for sewerage was 4.7 cents in the $ on the net annual value of the property served. The drainage rate was 1.0 cent in the $.

MELBOURNE SEWERAGE AND DRAINAGE: SERVICES, 1963-64 TO 1967-68

					Average daily pumping			
Year	*Number of houses for which sewers are provided*	*Estimated population for which sewers are provided*	*Average daily pumping*	*Total sewage pumped for the year*	*Per house*	*Per head of estimated population*	*Length of sewers, etc.*	*Length of main drains*
		'000	mill gal	mill gal	gallons	gallons	miles	miles
1963–64 .	443,291	1,446	89.7	32,833	202.4	62.0	3,932	211
1964–65 .	453,078	1,491	93.6	34,152	206.5	62.8	4,113	218
1965–66 .	467,705	1,599	94.6	34,545	202.4	59.2	4,311	229
1966–67 .	484,798	1,629	98.1	35,793	202.3	60.2	4,554	233
1967–68 .	509,185	1,719	86.1	31,514	169.1	50.1	4,739	240

The metropolitan sewerage system consists of the main system (serving an area of 111,521 acres) and 6 subsidiary systems—the Braeside system (serving an area of 6,157 acres), the Kew system (serving an area of 112 acres), the Maribyrnong system (serving an area of 182 acres), the Watsonia system (serving an area of 253 acres), the Lower Plenty system (serving an area of 1,099 acres), and the Heatherton system (serving an area of 231 acres). The Board of Works Farm, 26,809 acres in extent and situated about twenty-four miles south-west of Melbourne beyond the township Werribee, serves to purify and dispose of approximately ninety-seven per cent of the sewage flow of the metropolis before its discharge into Port Philip Bay. The total capital cost (less depreciation) of the farm to 30 June 1968 was $10,776,059. Revenue during 1967–68 amounted to $423,031, cost of sewage disposal to $673,631, trading expenses to $318,465, interest to $589,818, and net cost of sewage purification to $1,158,883. These financial particulars are included in the sewerage items of the summary below.

Melbourne and Metropolitan Board of Works' finances. The following table provides for the year 1967–68 a summary of the financial operations of the water supply, sewerage and drainage services conducted by the Melbourne and Metropolitan Board of Works, and of the combined services for the years 1963–64 to 1967–68.

MELBOURNE AND METROPOLITAN BOARD OF WORKS: FINANCES 1963-64 TO 1967-68

($'000)

			Expenditure				
Service, etc.	*Capital cost of works and buildings at 30 June (a)*	*Revenue*	*Working expenses*	*Interest and exchange*	*Debt redemption*	*Total*	*Surplus (+) or deficit (−)*
Water	163,363	14,957	6,926	8,226	. .	15,152	− 195
Sewerage . . .	200,945	17,013	4,989	9,667	. .	14,656	+2,357
Drainage . . .	33,149	3,617	1,180	1,365	. .	2,545	+1,072
General(*b*) . . .	13,764	. .	1,894	. .	2,685	4,579	−4,579
Total—1967–68 .	**411,221**	**35,587**	**14,989**	**19,258**	**2,685**	**36,932**	**−1,345**
1966–67 .	376,271	32,111	12,333	17,834	2,552	32,719	− 608
1965–66 .	345,210	30,165	11,362	16,526	2,274	30,162	+ 3
1964–65 .	314,972	25,307	9,308	14,856	1,960	26,124	− 817
1963–64 .	286,566	24,373	9,315	13,342	1,693	24,350	+ 23

(*a*) Total loan indebtedness—1967–68, $384,522,692. (*b*) Statutory and general expenditure not distributed over services.

State Rivers and Water Supply Commission. Water supply and conservation throughout Victoria (except for the area controlled by the Melbourne and Metropolitan Board of Works) is under the jurisdiction of the State Rivers and Water Supply Commission. The events leading to the establishment of the Commission, and its works in the spheres of irrigation, domestic and stock water supply to farms, drainage, flood protection, and river improvements, are described in the chapter Water Conservation and Irrigation. This section is therefore confined to the Commission's functions in connection with urban water supply and sewerage.

Extra-metropolitan water supply. At 30 June 1968 the Commission provided a reticulated water supply from its own works to 148 cities and towns having a combined population of 225,000 persons. The principal systems operated by the Commission serve part of the Mornington Peninsula—Dandenong area (about 107,000 people supplied); Bendigo, Castlemaine, etc. (58,000); and about 8,700 people in the Western District. In addition, 14,000 persons in a number of towns in the Bellarine Peninsula receive supply through a Commission-operated distributory system from headworks controlled by the Geelong Waterworks and Sewerage Trust. The Bendigo-Castlemaine supply also provides for the irrigation of 9,000 acres as well as urban requirements in the area. Outside these areas the Commission supplies mainly small towns in the north of the State in areas where it also supplies farms with water for irrigation or domestic and stock purposes. Capital expenditure by the Commission on urban water supply at 30 June 1968 was divided between the several systems as follows: Mornington Peninsula, $29,527,000, Bendigo-Castlemaine, $14,021,000 (includes the cost of supplying a comparatively large rural system with water for irrigation, stock and domestic purposes); Bellarine Peninsula, $3,446,000; Otway System (Western District), $2,983,000; other, $2,936,000; total, $52,913,000. This expenditure is net of redemption payments and includes expenditure on Lake Eppalock and Tarago Reservoir not yet charged to the water users. In addition to the towns supplied by the Commission there are some 653,000 people in 252 cities and towns throughout the State who get a reticulated water supply from works operated by local authorities.

All these authorities operate under the supervision of the State Rivers and Water Supply Commission, largely because the Government subsidises their capital expenditure. Most new works are financed from Government loan funds, but the Geelong Trust and in recent years some other local authorities borrowed money privately. In most cases the local authority controls both headworks and distribution system, but several towns draw their water from the State Rivers and Water Supply Commission and are concerned only with reticulation of the water. Together, therefore, the Commission and local authorities supply 400 urban centres containing some 878,000 people. Very few towns of any importance are now without reticulated water supply. The following table presents the financial position in respect of Government loan funds expended on town water supply at 30 June 1968.

TOWN WATER SUPPLY, VICTORIA: CAPITAL LIABILITY 30 JUNE 1968

($'000)

	Water supply provided by—		
	Local authorities	*State Rivers and Water Supply Commission*	*Total*
Government advances	60,000	53,500	113,500
Less redemption	4,700	600	5,300
Government advances outstanding	**55,300**	**52,900**	**108,200**
Borne by State	11,400	23,700	35,100
Borne locally	43,900	29,200	73,100

In addition, nearly $21,000,000 has been borrowed locally, mainly by the Geelong Waterworks and Sewerage Trust.

The proportion of loan capital borne by the State is much higher in the case of Commission undertakings than for towns supplied by local authorities. This is because most Commission undertakings have been developmental in nature. Besides meeting interest on capital borne by it, the State pays the difference between three per cent and the actual rate paid on practically all the capital carried locally. The total annual subsidy on country town water supply is currently about $3,300,000.

Extra-metropolitan sewerage systems. With the exception of the town of Eildon, whose sewerage system is controlled directly by the State Rivers and Water Supply Commission, the construction and management of sewerage works in Victoria's country cities and towns are the responsibility of local authorities supervised by the Commission. Except for the Geelong Waterworks and Sewerage Trust and the Latrobe Valley Water and Sewerage Board, which have special Acts dealing with their activities, all sewerage authorities operate under the Sewerage Districts Act. At 30 June 1968 92 sewerage authorities had been constituted. Of these 66 had systems in operation and 11 had works under construction.

Expenditure on sewerage in Victorian country towns at 30 June 1968 was approximately $75,200,000, of which some $60,400,000 had been advanced by private lenders. The annual State subsidy on country sewerage in Victoria is currently about $1,550,000, provided mainly in the form of subsidies on interest rates paid along the same lines as for town water supply.

Geelong Waterworks and Sewerage Trust. The Geelong Waterworks and Sewerage Trust was constituted in 1908 and reconstituted under the *Geelong Waterworks and Sewerage Act* 1909. It was further reconstituted in September 1950 to include a government nominee (chairman). An amendment in 1966 reduced the number of commissioners from seven to six. The amount of loan money which may be raised is limited to $30,000,000 for water supply undertakings and $20,000,000 for sewerage undertakings. The population supplied is estimated by the Trust at 115,094 persons. This and other general information relates to 30 June 1968.

The *Geelong water supply scheme* comprises two systems for gathering and storing water, the water in both systems being brought over fifty miles to Geelong. There are 8 storage reservoirs and 11 service basins whose total storage capacity is 13,292 million gallons. The length of water mains and reticulation is 567.8 miles. The total expenditure on water supply to 30 June 1968 was $17,922,017. General fund expenditure for 1967–68 comprised $479,578 for working expenses and $1,190,345 for interest, redemption and reserves, while revenue amounted to $1,658,691. The sinking fund appropriations at June 1968 amounted to $1,186,805. The replacement and contingencies reserve amounted to $1,280,427. There is a water rate of 6 cents in the $ on the net annual value of rateable properties.

The *Geelong sewerage scheme* consists of a main outfall sewer to the ocean and 326.2 miles of main and reticulation sewers. The sewerage area is 11,851 acres, and the number of buildings connected within the sewered areas is 28,497. The total expenditure on sewerage works to 30 June 1968 was $12,658,883 .The revenue in 1967–68 amounted to $1,084,756, and the general fund expenditure comprised $274,556 on working expenses and $782,362 on interest, redemption, and reserves. Sinking fund appropriations at 30 June 1968 were $618,556. Replacement and contingencies reserve amounted to $1,285,357. A general rate, 5.5 cents in the $, is levied on the net annual value of rateable properties.

Under the *Barwon River Improvement Act* 1939 a portion of the Barwon River is vested in the Geelong Waterworks and Sewerage Trust. General maintenance and improvement of the surrounding area is financed by the levying of an improvement rate of 0.25 cents in the $ on the net annual value of all lands within the drainage area. The revenue for 1967–68 amounted to $52,955.

The Ballarat Water Commissioners and the Ballarat Sewerage Authority. The body known as the Ballarat Water Commissioners was constituted on 1 July 1880 and the Ballarat Sewerage Authority on 30 November 1920. The members of the Water Commissioners constitute the Sewerage Authority. General and financial information given herein relates to the year ended 31 December 1968.

The *Ballarat water supply district* comprises an area of about 65 square miles, containing a population of about 63,000. The total storage capacity of the 7 reservoirs is 5,435 million gallons and the catchment area is 24,182 acres. The capital cost of construction of the waterworks was $6,207,320 to 31 December 1968. The liabilities amounted to $3,898,555 at 31 December 1968, including loans due to the Government totalling $3,530,210. The revenue for the year 1968 was $493,064. Working expenses during 1968 amounted to $277,917 and interest and other charges to $241,711. A water rate of 3.4 cents in the $ on the net annual valuation is levied, with a minimum charge of $6 per annum on any rateable property; water by measure, 16 cents per 1,000 gallons.

The *Ballarat sewerage district* comprises the City of Ballaarat, the Borough of Sebastopol, and parts of the Shires of Ballarat, Bungaree and Grenville. There are more than 217 miles of sewers. The capital cost of sewerage construction works to 31 December 1968 was $5,532,677. Two hundred and ninety-nine sewered areas had been declared as at 31 December 1968. Assessments in the sewerage district numbered 20,654, while those in sewered areas numbered 18,543. There were 15,926 buildings connected. The scheme is financed by debenture-issue loans from various financial institutions. The liabilities on account of loans secured for construction at 31 December 1968 amounted to $4,665,729, redemption payments at that date totalled $932,098. House connections financed by the Authority numbered 4,565. Revenue during 1968 amounted to $476,844, and expenditure, which included $317,227 for interest and redemption, was $476,535. A sewerage rate of 4.3 cents in the $ on the net annual valuation is levied, with a minimum charge of $10 per annum in respect of land on which there is no building and $12 per annum in respect of any land on which there is a building. The charge for trade wastes is 15 cents per 1,000 gallons.

Latrobe Valley Water and Sewerage Board. The Latrobe Valley Water and Sewerage Board was constituted on 1 July 1954. The Board consists of seven members, namely: two Government nominees (one of whom is Manager and also Board Chairman), three members elected by water supply, sewerage and river improvement authorities within the Latrobe Valley, and one representative each of the State Electricity Commission of Victoria and the Gas and Fuel Corporation of Victoria.

The Board is empowered to construct *water supply works within the Latrobe Valley*, but at present its main construction activities are confined to the central industrialised areas and the new township of Churchill. The total capital cost of construction of the waterworks was $11,425,537 to 30 June 1968. Liabilities amounted to $12,024,449, including loans due to the Government totalling $11,341,602. Revenue for the year was $720,188. Expenditure during 1967–68 amounted to $591,884 including interest amounting to $335,469. The Board does not strike a rate, but supplies consumers, including local water supply authorities, by measure. The quantity supplied during the year ended 30 June 1968 was 10,814 million gallons.

The *Latrobe Valley sewerage system* consists of a main outfall sewer, about 52 miles in length, to convey wastes to an area where they are disposed of on land for agricultural purposes. Wastes conveyed consist mainly of industrial wastes, such as paper wastes and gasification wastes, together with small quantities of domestic sewage. The capital cost of the sewerage construction works to 30 June 1968 was $6,645,845. Liabilities amounted to $7,244,191, including loans due to the Government totalling $5,922,576. Revenue in 1967–68 was $325,402 and expenditure totalled $418,021, including $107,517 interest payments. No sewerage rate is levied, but a charge is made by measure for wastes both from industries and public authorities.

Queensland

Brisbane City Council (*to* 30 *June* 1968). This organisation conducts the water supply and sewerage systems of the City of Brisbane, and also supplies, in bulk, the whole of the water used by the City of Ipswich and a portion of that used by the City of Redcliffe and Albert Shire Council. Redcliffe supplements its supply from that of the Pine Rivers Shire Council, while Albert also draws on its own reservoirs.

Storage facilities for *Brisbane water supply* comprise the following (available capacities are shown in parentheses): Somerset Reservoir, 200,000 million gallons (67,500 million gallons); Lake Manchester, 5,800 million gallons (5,720 million gallons); Brisbane River, Mount Crosby Weir, 540 million gallons (500 million gallons); Pure Water Reservoir, Holt's Hill, 11 million gallons (11 million gallons); Enoggera Reservoir, 1,000 million gallons (600 million gallons); Gold Creek Reservoir, 407 million gallons (400 million gallons). There are 22 service reservoirs with a capacity of approximately 52 million gallons. The Somerset reservoir is a dual purpose project with a designed total holding capacity of 200,000 million gallons, 67,500 million gallons to be for water storage and 132,500 million gallons for flood mitigation. Water rating for the year ended 30 June 1968 was 1.25 cents in the $ on the unimproved valuation of all rateable land, with a minimum charge of $30 for the year for each assessment. The following table is a summary of operations of the complete Brisbane City Council system (Brisbane, Ipswich, Redcliffe, and portion of Albert Shire) for the years 1963–64 to 1967–68.

BRISBANE WATER SUPPLY(*a*): SERVICES, 1963-64 TO 1967-68

Year	*Services connected*	*Estimated population supplied*	*Average daily consumption*	*Total consumption for the year*	*Average daily consumption*		*Length of trunk and reticulation mains*
					Per service	*Per head of estimated population*	
			mill gal	mill gal	gallons	gallons	miles
1963–64	188,032	685,223	51.2	18,696	272	74.8	2,410
1964–65	193,471	703,258	61.4	22,409	317	87.3	2,564
1965–66	197,707	722,970	67.6	24,668	342	93.5	2,666
1966–67	202,886	740,332	66.1	24,110	326	89.2	2,735
1967–68	207,657	759,434	76.7	27,984	369	101.0	2,823

(*a*) Includes Ipswich, Redcliffe and portion of Albert Shire.

The sewage treatment works of the *Brisbane sewerage scheme* is situated at Luggage Point at the entrance to the Brisbane River. Sewerage rating for the year ended 30 June 1968 was 1.4 cents in the $ on the unimproved valuation of each portion of land, with a minimum charge of $30 for the year. The following table is a summary of operations of the Brisbane sewerage scheme for the years 1963–64 to 1967–68.

BRISBANE SEWERAGE: SERVICES, 1963-64 TO 1967-68

Year	*Premises connected*	*Estimated population served*	*Total sewage pumped for the year*	*Length of main, branch, reticulation, etc. sewers*
			mill gal	miles
1963–64 . .	75,964	281,067	7,211	1,042
1964–65 . .	84,390	312,243	7,190	1,222
1965–66 . .	90,940	336,478	8,821	1,341
1966–67 . .	102,062	377,629	9,042	1,472
1967–68 . .	109,364	404,647	8,358	1,607

Brisbane City Council water supply and sewerage systems—finances. The following table shows particulars of the finances of the water supply and sewerage undertakings of the Brisbane City Council for the years 1963–64 to 1967–68.

BRISBANE WATER SUPPLY AND SEWERAGE: FINANCES, 1963-64 TO 1967-68 ($'000)

Service and year	*Gross capital cost to 30 June*	*Revenue*	*Expenditure*			*Surplus* (+) *or deficit* (−)
			Working expenses	*Interest, redemption, etc. charges*	*Total* (*a*)	
Water supply—						
1963–64 . .	46,175	5,989	2,492	2,330	5,318	+ 670
1964–65 . .	49,768	7,030	2,827	2,436	5,889	+ 1,141
1965–66 . .	54,635	8,365	3,069	2,503	8,471	− 106
1966–67 . .	59,947	8,977	3,414	2,630	8,803	+ 174
1967–68 . .	64,626	9,808	3,661	2,760	9,132	+ 676
Sewerage—						
1963–64 . .	45,439	2,763	651	1,550	2,571	+ 192
1964–65 . .	50,184	3,664	803	1,705	3,434	+ 230
1965–66 . .	55,858	4,829	882	1,829	4,172	+ 657
1966–67 . .	61,517	5,535	1,024	1,966	4,709	+ 826
1967–68 . .	69,264	7,237	1,105	2,225	6,619	+ 618

(*a*) Total, including other expenditure.

Country towns. In addition to the City of Brisbane, there were at 30 June 1967, 215 cities and towns in Queensland provided with water supply systems controlled by municipal and shire councils. At 30 June 1967 there were 53 cities or towns in addition to Brisbane with sewerage systems. The receipts (other than loan and loan subsidy) of water undertakings controlled by the cities and towns referred to above amounted to $8,433,087 in 1966–67. Expenditure amounted to $8,651,141, including $3,775,915 for debt charges. In addition, expenditure from loans and loan subsidy amounted to $10,130,478. Finances of sewerage undertakings are incorporated in council general funds and are not available separately.

South Australia

The water supply and sewerage systems in this State were constructed mainly, and are maintained, by the Engineering and Water Supply Department, under the control of the Minister of Works. Works controlled by the Department are the Adelaide, Barossa, Beetaloo, Bundaleer, Moorook, Tod River, Warren, Yorke Peninsula, and other country water districts systems, the Morgan–Whyalla water supply system, the metropolitan and country sewerage systems, the

Metropolitan Flood Waters Scheme, and works on the River Murray constructed under the River Murray Waters Agreement. Several water supply schemes on the Murray River are administered by the Department of Lands in conjunction with irrigation works, and supplies to Woomera and Leigh Creek coalfield are controlled by the operating authorities. The following tables show particulars of metropolitan and country waterworks combined.

WATERWORKS, SOUTH AUSTRALIA: SERVICES, 1963–64 TO 1967–68

Year	*Assessments(a)*		*Area of districts supplied (a)*	*Capacity of reservoirs, tanks, etc.*	*Length of mains*	*Number of meters*
	Number	*Annual value*				
		$'000	'000 acres	mill gal	miles	
1963–64	365,579	104,159	13,373	45,173	10,469	278,183
1964–65	376,425	109,651	13,524	45,179	10,748	292,212
1965–66	390,045	127,599	13,849	45,189	11,091	303,288
1966–67	404,013	137,002	13,887	45,193	11,287	312,535
1967–68	421,764	143,217	13,927	45,332	11,447	320,461

(*a*) Excludes Morgan–Whyalla Water Supply—water sold by measure.

WATERWORKS, SOUTH AUSTRALIA: FINANCES, 1963–64 TO 1967–68
($'000)

Year	*Invested capital at 30 June (a)*	*Revenue*	*Expenditure*			*Deficit*
			Working expenses (b)	*Interest*	*Total*	
1963–64	172,583	11,103	7,752	6,960	14,711	3,608
1964–65	189,205	11,955	8,475	7,694	16,169	4,214
1965–66	201,828	13,393	9,845	8,376	18,221	4,828
1966–67	213,768	15,674	9,959	8,937	18,896	3,222
1967–68	226,477	14,607	12,008	9,684	21,692	7,085

(*a*) After deduction of depreciation. (*b*) Includes debt redemption.

Adelaide waterworks. At 30 June 1968 the Adelaide waterworks supplied districts covering 377 square miles of the metropolis and extending to near country areas. The capacity of reservoirs and storage tanks was 36,630 million gallons and there were 3,472 miles of metropolitan mains. The Mannum–Adelaide pipeline conveys water from the River Murray to Adelaide at a rate of up to 66 million gallons a day. Water is delivered to a terminal storage near Adelaide and hence to the metropolitan distribution system or alternatively it can be delivered into metropolitan reservoirs on the River Torrens or to reservoirs on the River Onkaparinga by further pumping. The pipeline supplements the Warren system and other country areas.

ADELAIDE WATERWORKS: FINANCES, 1963–64 TO 1967–68
($'000)

Year	*Invested capital at 30 June (a)*	*Revenue*	*Expenditure*			*Surplus (+) or deficit (−)*
			Working expenses (b)	*Interest*	*Total*	
1963–64	86,692	7,796	3,861	3,610	7,471	+ 326
1964–65	92,872	8,417	4,222	3,907	8,129	+ 289
1965–66	98,056	9,521	5,292	4,248	9,540	− 19
1966–67	104,067	11,083	5,142	4,500	9,642	+1,441
1967–68	108,936	10,267	6,746	4,730	11,476	−1,209

(*a*) After deduction of depreciation. (*b*) Includes debt redemption.

Adelaide metropolitan sewerage system. The Adelaide metropolitan sewerage system, comprising the Adelaide, Glenelg, Port Adelaide, Christies Beach, and Salisbury–Elizabeth areas of 184 square miles in all, includes treatment works at Glenelg, Port Adelaide, Bolivar, and Christies Beach. Financial and other particulars for 1963–64 to 1967–68 are shown hereunder.

ADELAIDE METROPOLITAN SEWERAGE: SUMMARY, 1963-64 TO 1967-68

Year	Length of sewers	Number of connections	Invested capital at 30 June (a)	Revenue	Expenditure			Surplus
					Working expenses (b)	Interest	Total	
	miles		$'000	$'000	$'000	$'000	$'000	$'000
1963–64	1,774	194,889	38,996	5,239	2,201	1,265	3,466	1,774
1964–65	1,854	204,128	47,127	5,513	2,363	1,380	3,743	1,769
1965–66	1,952	213,375	56,235	6,386	2,614	1,561	4,175	2,211
1966–67	2,039	220,799	66,158	6,804	2,880	2,195	5,075	1,729
1967–68	2,125	227,489	74,808	7,156	3,375	2,822	6,197	959

(a) After deduction of depreciation. (b) Includes debt redemption.

Country sewerage schemes. Sewerage schemes are operating at Port Lincoln, Naracoorte, Mount Gambier, Lobethal, Gumeracha, Nangwarry, Mount Burr, Myponga, and Angaston. At Port Lincoln and Mount Gambier the sewers discharge to ocean outfalls, and treatment works are used on the other systems. There are 215 miles of sewers and 10,715 connections in the country systems. Sewerage schemes for Whyalla, Mannum and Millicent are under construction and operating in part.

Country water supply. Water districts systems at 30 June 1968 comprised an area of 13,685,159 acres. Supply came from reservoirs having a total capacity of 20,995 million gallons, from the River Murray, and from underground sources. Apart from local supplies, water from the River Murray comes from branches of the Mannum–Adelaide main and from the Morgan–Whyalla main. The principal areas of underground supplies are in the south-east of the State, where water from the Murray Basin can be had at moderate depths or from lakes, and from sand beds on Eyre Peninsula. In the year 1967–68 supplies made to Mount Gambier, Naracoorte and other towns amounted to 1,313 million gallons, and the Uley-Wanilla, Lincoln and Polda Basins contributed 788 million gallons to the Tod River Water District.

COUNTRY WATERWORKS, SOUTH AUSTRALIA: FINANCES, 1963-64 TO 1967-68
($'000)

Year	Invested capital at 30 June (a)	Revenue	Expenditure			Deficit
			Working expenses (b)	Interest	Total	
1963–64	85,892	3,307	3,891	3,350	7,241	3,934
1964–65	96,333	3,538	4,253	3,787	8,040	4,502
1965–66	103,772	3,872	4,553	4,128	8,681	4,809
1966–67	109,701	4,591	4,817	4,437	9,254	4,663
1967–68	117,541	4,340	5,262	4,954	10,216	5 876

(a) After deduction of depreciation. (b) Includes debt redemption.

Morgan-Whyalla water supply scheme. This scheme, which has 223 miles of main via Port Augusta and 176 miles of main via the Spencer Gulf undersea crossing, was officially opened on 31 March 1944, the capital invested to 30 June 1968 being $33,562,156. Particulars of the scheme, where applicable, are included in the tables of the combined waterworks, page 803. Apart from supplying Whyalla, the mains have been used to allow expansion of reservoir supplies in the northern agricultural area of the State, and to meet new demands caused by industrial growth at Whyalla. During 1967–68 water used from the scheme amounted to 5,507 million gallons.

Western Australia

The principal water supply systems of Western Australia are under the control of two State authorities, the Metropolitan Water Supply, Sewerage and Drainage Board and the Department of Public Works and Water Supply. The Metropolitan Water Supply, Sewerage and Drainage

Board is constituted under the provisions of the *Metropolitan Water Supply, Sewerage, and Drainage Act* 1909–1968 and consists of seven members appointed by the Governor. The area which constitutes the territory administered by the Board encompasses approximately 1,270 square miles and extends from Perth southward to Rockingham and Serpentine, northward to Sorrento, and eastward to Greenmount and Kalamunda. The Department of Public Works and Water Supply controls the Goldfields and Agricultural Water Supply and the Great Southern Towns Water Supply as well as 114 local water supplies (*see also* the chapter Water Conservation and Irrigation). Four independent town schemes are controlled by local Water Boards in country areas, and individual water supplies serve railways, timber mill towns, isolated mines, pastoral properties, stock routes, and agricultural areas, mainly from dams, tanks, wells and bores.

Metropolitan water supply, sewerage and drainage. The sources of the metropolitan water supply are Serpentine Reservoir and Serpentine Pipehead Reservoir, Canning Reservoir, Wungong Brook Diversion Weir, Churchman Brook Reservoir, and Victoria Reservoir. The largest of these sources are the Serpentine Reservoir and the Canning Reservoir. Serpentine Reservoir is constructed of rolled earth fill, and the embankment rises 171 feet above the stream bed, the length at the crest being 1,390 feet. Its capacity is 39,000 million gallons, and the area of the catchment is 245 square miles. Canning Reservoir, with an estimated catchment area of 302 square miles, has a storage capacity of 20,550 million gallons retained by a concrete wall 218 feet high and 1,534 feet long at the crest. Water from storages on the Darling Range is conveyed to service reservoirs to serve the City of Perth and the metropolitan area. A limited quantity of water is drawn from Mundaring Weir to serve sections of Greenmount, and to meet the peak demands of summer consumption supplies are supplemented from artesian bores, which can provide a daily maximum of 15 million gallons. The amount of bore water used is rarely more than 10 per cent of the metropolitan consumption and is usually considerably less.

The following table shows particulars of the *metropolitan water supply services* for 1963–64 to 1967–68.

METROPOLITAN WATER SUPPLY, WESTERN AUSTRALIA: SERVICES 1963-64 TO 1967-68

Year	*Number of services (a)*	*Average daily consumption*	*Total consumption for year*	*Average daily consumption per service (b)*	*Length of mains*	*Number of meters*
		mill gal	mill gal	gallons	miles	
1963–64	149,033	53.2	19,454	362	2,411	130,480
1964–65	154,051	55.7	20,339	367	2,526	135,471
1965–66	158,675	59.5	21,707	375	2,654	139,435
1966–67	164,782	70.8	25,843	430	2,798	146,028
1967–68	173,068	68.2	24,958	409	2,923	152,603

(*a*) Figures relate to 30 June. (*b*) Calculated from averages for the year.

Water rating for 1967–68 was 5 cents in the $ on annual valuation on land used for residential purposes and 7.5 cents in the $ on annual valuation on land not so used.

Some particulars of the *metropolitan sewerage and main drainage services* for 1963–64 to 1967–68 are shown in the following table.

METROPOLITAN SEWERAGE AND MAIN DRAINAGE WESTERN AUSTRALIA: SERVICES 1963-64 TO 1967-68

Year	*Services*	*Length of sewers*	*Length of main drains*
		miles	miles
1963–64	68,958	769	94
1964–65	69,553	777	100
1965–66	70,283	816	102
1966–67	71,188	848	109
1967–68	72,177	886	118

Sewerage rating for 1967–68 was 8.75 cents in the $ on annual valuation, while metropolitan main drainage rating was 2.25 cents in the $.

Metropolitan Water Supply, Sewerage and Drainage Board—finances. The following table shows particulars of the finances of the Western Australian Metropolitan Water Supply, Sewerage and Drainage Board.

METROPOLITAN WATER SUPPLY, SEWERAGE AND MAIN DRAINAGE WESTERN AUSTRALIA: FINANCES, 1963-64 TO 1967-68

($'000)

Service and year	*Capital cost to 30 June*	*Revenue*	*Expenditure*			*Surplus (+) or deficit (−)*
			Working expenses	*Interest and debt redemption*	*Total*	
Water supply—						
1963–64 . . .	51,482	4,175	1,583	2,502	4,084	+ 91
1964–65 . . .	54,334	4,370	1,653	2,641	4,294	+ 76
1965–66 . . .	58,336	4,861	1,815	3,018	4,833	+ 28
1966–67 . . .	62,137	5,551	2,307	3,061	5,368	+183
1967–68 . . .	66,217	5,782	2,292	3,243	5,535	+247
Sewerage—						
1963–64 . . .	19,851	2,323	1,214	1,015	2,229	+ 93
1964–65 . . .	22,050	2,426	1,272	1,053	2,325	+101
1965–66 . . .	24,243	2,823	1,336	1,176	2,512	+310
1966–67 . . .	26,737	3,000	1,622	1,340	2,961	+ 38
1967–68 . . .	29,286	3,198	1,689	1,474	3,164	+ 34
Main drainage—						
1963–64 . . .	4,998	310	153	217	370	− 60
1964–65 . . .	5,641	342	191	238	429	− 87
1965–66 . . .	6,344	418	245	275	520	−102
1966–67 . . .	6,956	629	298	319	617	+ 12
1967–68 . . .	7,433	721	314	349	663	+ 58

Country water supplies. Information concerning country water supplies is included in the chapter Water Conservation and Irrigation.

Tasmania

Waterworks. At the end of 1967–68 there were 106 municipally operated waterworks in Tasmania. The capacity of the reservoirs was approximately 2,938 million gallons, the estimated population served was 328,000, and the number of properties served was approximately 106,000. The North Esk Regional Water Supply Scheme is operated by the Rivers and Water Supply Commission as a State concern, supplying bulk water to the municipalities of St Leonards, George Town, Lilydale, and portion of Westbury. This scheme also supplies water to industries situated near the Tamar River. Also vested in the Commission is the West Tamar Water Supply Scheme which serves the Municipality of Beaconsfield, and is operated by the Beaconsfield Council as the agent of the Commission. The over-all control of water supply in the greater Hobart area, comprising the municipalities of Hobart, Clarence, Glenorchy, and Kingborough, is vested in the Metropolitan Water Board, but the municipalities retain primary responsibility for reticulation. The Board has constructed a large bulk supply at Bryn Estyn, near New Norfolk, which supplies bulk water from the Derwent River to the metropolitan area and has a pipeline capacity of 20 million gallons a day. In addition, the Board also controls the Southern Regional Water Supply Scheme, which supplies water to Hobart's eastern shore. In addition to supplying the metropolitan area, the Board extended its service to supply the towns of Cambridge, Midway Point, Sorell, Seven Mile Beach, Rokeby, and Lauderdale, and it is planned to take it to the towns of Margate, Snug, and Howden in due course. The storage at Risdon Brook with a capacity of 800 million gallons was completed in February 1968. The Board has at present under construction 2 half-million gallon reservoirs to serve the towns of Kingston, Howden and Margate.

Sewerage. At the end of 1967–68 there were 28 municipal sewerage schemes in operation in Tasmania. They served an estimated population of 225,000 and the number of tenements served was approximately 71,000.

Northern Territory

Information relating to water supply in the Northern Territory may be found in the chapter Water Conservation and Irrigation.

Australian Capital Territory

The water supply, sewerage and drainage systems in the Australian Capital Territory are under the control of the Commonwealth Department of Works. The sources of the water supply are: Cotter Dam (capacity 967 million gallons), Bendora Dam (2,360 million gallons) and Corin Dam (capacity 16,600 million gallons). Water is fed from Bendora Dam by gravity to 17 major reservoirs. The maximum daily supply is 45 million gallons. In addition, a pumping capacity of 38.5 million gallons per day is available from 9 pumps. The total population served in the Australian Capital Territory, which during 1967–68 consumed 4,797.3 million gallons of water, was 110,000 (at 30 June 1968). In addition, the Canberra water supply system supplied 367.3 million gallons of water to Queanbeyan, New South Wales. The total number of water meters at 30 June 1968 was 27,982 and the total length of water lines was 534.9 miles. The sewerage system for Canberra and suburbs has three treatment works: the Weston Creek works provides for 100,000 persons, the Fyshwick works provides for 10,000 persons and the Belconnen works provides for 5,000 persons. There were 462.4 miles of sewerage, and 6½ miles of sewer rising mains (at 30 June 1968). There were also 491.4 miles of stormwater drains.

Harbour boards and trusts

The number and net tonnage of vessels which entered the major ports in each State during the years 1966–67 and 1967–68 are shown in Chapter 12, Transport, Communication and Travel (*see* page 374). Particulars of overseas and interstate cargo discharged and shipped are shown on page 376 of the same chapter.

New South Wales

Maritime Services Board of New South Wales. The Maritime Services Board of New South Wales is a corporate body of seven commissioners comprising three full-time members and four part-time members representing shipping and other maritime interests. The Board was constituted on 1 February 1936, under the Maritime Services Act, 1935, to co-ordinate the port and navigation services of the State, which had previously been administered by the Sydney Harbour Trust and by the State Department of Navigation. The Board exercises general control over intra-state shipping, including the survey and certification of vessels, the licensing of harbour craft, and the examination and issue of certificates to officers. It is responsible for the provision of pilotage services, lights, beacons, buoys, and other port facilities, imposes and collects rates and charges on goods and vessels, and is vested with the general control and management of the navigable waters and ports within the State. At the ports of Sydney, Newcastle and Botany Bay the Board is also responsible for the provision of adequate wharfage and channels and carries out all construction, maintenance and dredging work. All revenue earned by the Board at the ports of Sydney, Newcastle and Botany Bay, with the exception of that earned from pilotage and navigational services, is credited to the Maritime Services Board Fund, and all revenue expenditure incurred at the three ports is drawn from that fund. The following table shows particulars of the finances of the Board in respect of the ports of Sydney, Newcastle and Botany Bay.

MARITIME SERVICES BOARD FUND: FINANCES OF THE PORTS OF SYDNEY, NEWCASTLE AND BOTANY BAY, 1963–64 TO 1967–68

($'000)

Year	*Revenue*				*Expenditure*(*a*)			
	Wharfage and transhipment rates	*Tonnage rates and berthing charges*	*Other charges*	*Total*	*Administration and maintenance*	*Interest, debt redemption, exchange, etc.*	*Total*	*Surplus*
1963–64 .	10,838	1,755	2,933	15,526	7,864	7,567	15,431	95
1964–65 .	11,594	1,858	3,565	17,017	9,109	7,835	16,945	72
1965–66 .	10,711	1,832	3,980	16,523	9,512	6,916	16,428	95
1966–67 .	11,501	1,895	4,282	17,678	9,476	8,113	17,589	89
1967–68 .	12,664	2,024	5,645	20,333	10,830	9,451	20,280	53

(*a*) Excludes capital expenditure but includes transfers to the Renewals Fund Reserve Account ($4,778,000 in 1963–64, $5,080,000 in 1964–65, $3,060,000 in 1965–66, $3,975,000 in 1966–67, and $4,940,000 in 1967–68).

Port of Sydney. The entrance to Sydney Harbour, the principal port of New South Wales, is nearly a mile wide, and the depth of its navigable channel is not less than 80 feet. Between the entrance, known as 'The Heads', and the Harbour proper, a distance of four miles, there are two separate channels, each 700 feet wide, the Western Channel not less than 45 feet deep (low water ordinary spring tide) and the Eastern Channel 38 feet deep. The foreshores, which have been reduced by reclamations, are 152 miles in length, and the total area of the port is 13,600 acres, or 21 square miles, of which about one-half has a depth of 30 feet or more at low water ordinary spring tide. The mean range of tides is 3 feet 6 inches.

The wharves are situated close to the business centre of the city, about four or five miles from the Heads. At 30 June 1968 there were 5 dolphin berths 3,350 feet long, and 86 effective commercial cargo berths, with a total length of 43,186 feet, controlled by the Board. Accommodation for harbour craft amounts to 2,245 feet, while the length of other berths, including oil and private wharves, totals 28,815 feet. Depth of water at wharves is up to 36 feet. Special facilities for the storage and handling of products such as wheat, wool, coal, etc. are provided, and modern plant has been installed for replenishing ships' bunkers with oil or coal. Docking facilities are available for large vessels and the Captain Cook Graving Dock ranks among the largest graving docks in the world, being 1,139 feet by 147 feet 7½ inches with a depth of 45 feet 2 inches over the sill at high water. There are also several smaller dry docks and floating docks in the port.

Port of Newcastle. As from 1 May 1961 the Maritime Services Board of New South Wales became the single authority for the port of Newcastle. An Advisory Committee consisting of eight members, appointed by the Governor, assists the Board in matters associated with the operation of the port. Shipping at Newcastle is concerned primarily with the coal, iron and steel and other heavy industries located in the district, however facilities are available for the shipment of wool, wheat and frozen meat, and a wharf is available for timber.

The area used by shipping is about 570 acres, excluding the entrance to the harbour and the inner basin, which together cover an area of 162 acres. The width of the harbour at the entrance is 1,200 feet, and the navigable channel, with a depth of 36 feet at low water, is 500 feet wide. Wharfage accommodation amounts to approximately 15,000 feet, including about 3,000 feet of privately owned wharfage. There are also two dolphin berths available for tie-up purposes. A floating dock of 15,000 tons capacity is available at the port and a coal loading plant capable of loading at the rate of 2,000 tons an hour is now operating. The bulk berth which recently became operative at Walsh Island is equipped with two grab unloaders each with a nominal capacity of 650 tons an hour.

Botany Bay. The Maritime Services Board of New South Wales is the administrative and controlling authority. The port is primarily a discharging centre for the oil refinery at Kurnell, near Sydney, and two berths are available as well as tanker mooring buoys. The entrance to the Bay is approximately one and a quarter miles wide, with a minimum depth of about 38 feet in the dredged swinging basin.

Port Kembla. As from 3 May 1948 the Maritime Services Board assumed the administration and navigational control of Port Kembla, which had previously been administered by the New South Wales Department of Public Works. This Department, however, continues to be the constructing authority in respect of works, dredging and maintenance. An Advisory Committee consisting of seven members, appointed by the Governor, has been formed to assist the Board in the operation of the port. It has an area of approximately 340 acres, with depths ranging from 20 to 50 feet (low water ordinary spring tide), and wharfage accommodation totalling 9,000 feet has been provided for large ocean-going vessels. No cargo sheds are available, as the nature of trade at the port does not call for the provision of sheltered storage accommodation at the berths. It is the port of the southern coalfields and for the expanding industrial area in and about Wollongong. The developmental programme for Port Kembla includes the construction of an inner harbour to provide wharfage for the steelworks in addition to modern general cargo berths. The first stage has been completed and a coal loading plant capable of loading at the rate of 2,000 tons an hour is now available. Present accommodation is 2,550 feet of wharfage, with 36 feet (low water ordinary spring tide) of water alongside. Width in the entrance to the inner harbour basin is 400 feet.

Other ports. In addition to the ports of Sydney, Newcastle, Port Kembla, and Botany Bay, the Board controls 29 outports along the coastline of 609 miles. The shipping trade of these outports is relatively small.

Port charges. The port charges payable in respect of shipping and ships' cargoes in New South Wales are imposed by the Commonwealth Government in terms of the Lighthouses Act and the Navigation Act, and by the State authorities under the Navigation Act of New South Wales, the Harbour and Tonnage Rates Act, and the Sydney Harbour Trust Act. Since 1 February 1936 the State enactments have been administered by the Maritime Services Board. The gross collections by the State authorities amounted to $27,278,000 in 1967–68. This figure includes the revenue for the ports of Sydney, Newcastle and Botany Bay (*see* table on page 807) and State navigation service collections, $6,944,000 in 1967–68.

Victoria

Melbourne Harbor Trust. Information regarding the origin and constitution of this Trust, which controls the port of Melbourne, appears in Official Year Book No. 12, pages 970–2. The port of Melbourne comes under the control of the Melbourne Harbor Trust Commissioners, an independent autonomous statutory organisation, with a full-time chairman and five part-time commissioners with specialised knowledge of the requirements of exporters, primary producers, shipowners, importers, and of all aspects of port labour. The area of water and land under the control of the Trust is ten and a half square miles, with sheds available for cargo in transit totalling 22,928 feet in length and covering an area of about 43 acres. Three of the largest transit sheds on the Australian coast are in operation at Appleton Dock. The sheds are 600 feet long by 150 feet wide, each with a cargo stacking area of 81,000 square feet. The berths are used for conventional general cargo trade as well as the unit-load container handling for general cargo in the overseas trade. The total length of wharves, piers and jetties in the port is 61,550 feet, covering an area of about 59 acres with 56,940 feet of effective berthing space.

In line with world-wide changes in cargo handling methods, current planning and construction in the Port of Melbourne are almost exclusively devoted to facilities catering for container ships and cargo as well as for the multi-purpose unit-load container conventional ships and cargo. The port's first overseas container terminal, Swanson Dock, which has 1,050 ft of concrete wharf apron with 22.5 acres stacking area behind the berth, was officially opened on 7 March 1968. An additional 800 ft long 'common user' container berth on the east side of Swanson Dock was expected to be completed in August 1969. Two roll-on roll-off container unit-load berths were also completed in early 1969, one at North Wharf for the trans-Tasman trade to New Zealand, having a 830 ft wharf apron and 3.3 acre stacking area behind the berth and the other at the River Entrance Docks, with a 600 ft wharf apron and additional 11.3 acre stacking area for the eastern seaboard trade.

The depth of water (low water ordinary spring tide) from the main channels to the principal wharves is 31 to 39 feet.

The following table shows particulars of the financial operations of the Trust.

MELBOURNE HARBOR TRUST: FINANCES, 1964 TO 1968
($'000)

		Revenue		*Expenditure*				
Year	*Gross loan indebtedness at 31 December*	*Wharfage and tonnage rates*	*Total*	*Operation, administration and maintenance*	*Interest, debt redemption, exchange, etc.*	*General reserve, depreciation, renewals and insurance account*	*Total*	*Surplus (+) or deficit (−)*
1964 . .	29,773	7,145	11,312	6,687	2,632	1,812	11,131	+181
1965 . .	30,473	7,058	11,434	6,451	2,393	2,382	11,226	+208
1966 . .	32,229	6,393	10,695	6,235	1,712	2,583	10,530	+165
1967 . .	34,484	6,692	11,322	6,441	2,142	2,567	11,150	+172
1968 . .	36,029	8,357	13,573	6,972	2,381	4,002	13,355	+218

Geelong Harbor Trust. The Geelong Harbor Trust, constituted in 1905, is under the control of three Commissioners appointed from time to time by the Governor-in-Council. At the end of 1967 there were 18 effective berths in the port, plus 2 berths at the Commonwealth Explosives Pier, Point Wilson, owned and operated by the Commonwealth. The construction of a modern dry bulk berth with an initial discharge rate of 1,000 tons an hour commenced in 1967, but the 4 seven and a half ton cranes to operate on this berth have in the meantime commenced to operate on the adjacent Kings Wharf. The Trust operates its own towage fleet of seven tugs, the largest of 1,900 b.h.p. Eight berths have a depth of 36 feet at low water; all other berths (except Commonwealth Explosives Pier, Point Wilson and Point Henry Pier, 30 feet) have a depth of 32 feet at low water. Revenue for the year 1967 was $3,479,463, and expenditure from revenue totalled $2,211,170. At 31 December 1967 the value of the Trust's fixed assets was $25,855,472 and loans outstanding amounted to $7,735,915.

Portland Harbor Trust. The port of Portland provides unimpeded access for large ocean-going vessels to the entrance of a 250-acre harbour basin having a minimum depth of 36 feet of water under all tidal conditions. A Board of three commissioners controlling the port is a corporate body appointed on a part-time basis and nominated to represent interests concerned with port operating activities.

Construction of an all-weather deep sea port at Portland was completed to operational standards during 1960. A new oil tanker berth was commissioned during 1963 and the completion of a 1.25 million bushel bulk grain terminal in 1965 provided in-transit storage for grain awaiting overseas shipment. In 1968 a new berth for handling bulk commodities was completed. This berth was designed primarily to handle imports associated with the manufacture of fertiliser at Lady Bay.

Operating revenue and expenditure for the year ended 30 June 1968 were $352,373 and $299,697 respectively. The fall in revenue and expenditure was due to the effect of the drought on the grain crops. The value of the Trust's fixed assets, less depreciation, was $17,948,837 at 30 June 1968, and loans and advances outstanding amounted to $18,498,496.

Queensland

The ports of Queensland, except Brisbane and certain minor ports, are administered by harbour boards with members representing the towns and districts served by the ports. Brisbane and the minor ports are controlled by the State Treasury through the Department of Harbours and Marine, which supervises the engineering activities of the other ports.

Brisbane. Brisbane, in its dredged and improved river, accommodates comfortably the largest vessels in the Australian trade. The main centres for shipping, although further downstream than formerly because of the increasing size of vessels, are still within easy access of the city. Adequate dry-docking facilities are available. The finances of Brisbane Harbour for the years 1962–63 to 1966–67 are shown below.

BRISBANE HARBOUR: FINANCES, 1962-63 TO 1966-67
($'000)

Year	Loan indebtedness at 30 June	*Receipts*		*Payments*	
		Harbour dues	*Total*	*Working expenses (a)*	*Total*
1962–63	5,296	1,640	2,514	1,774	2,146
1963–64	5,032	1,859	2,500	3,346	3,837
1964–65	4,912	2,125	2,796	2,305	2,646
1965–66	4,787	2,094	3,121	2,157	2,498
1966–67	4,636	2,044	2,987	2,228	2,561

(*a*) Excludes interest and redemption included in total.

In addition to Brisbane harbour, the Department of Harbours and Marine also controls the Brisbane Dry Dock, the Cairncross Dock, and 10 smaller harbours not administered by harbour boards.

Harbour boards. Harbour boards control the ports of Bowen, Bundaberg, Cairns, Gladstone, Mackay, Rockhampton, and Townsville. Finances for each port for the year ended 30 June 1967 are shown on page 811, together with a summary for the years ended 30 June 1963 to 1967.

HARBOUR BOARDS, QUEENSLAND: FINANCES, 1962-63 TO 1966-67
($'000)

Harbour board	*Loan indebtedness at 30 June*	*Revenue*		*Expenditure (excluding loan)*		*Surplus(+) or deficit(−)*
		Wharfage and harbour dues	*Total*	*Working expenses*	*Total including interest and redemption (a)*	
Bowen . . .	545	17	21	21	21	..
Bundaberg . . .	6,282	780	1,354	288	1,188	+166
Cairns . . .	6,951	569	1,306	397	1,033	+273
Gladstone . . .	6,957	402	3,056	227	3,236	−180
Mackay . . .	4,149	480	1,158	354	1,033	+125
Rockhampton . .	2,806	110	208	68	215	−7
Townsville . . .	8,694	752	1,269	521	1,475	−206
Total, 1966–67 .	**36,384**	**3,109**	**8,372**	**1,876**	**8,201**	**+171**
1965–66 .	35,436	2,524	8,862	1,792	9,088	−226
1964–65 .	33,824	2,412	6,337	1,398	6,169	+168
1963–64 .	28,369	2,329	5,419	1,362	5,402	+17
1962–63 .	22,619	2,179	4,119	1,203	3,731	+388

(*a*) Includes expenditure on capital works from accumulated revenue.

South Australia

Department of Marine and Harbors. All South Australian harbours are controlled by the Department of Marine and Harbors, which is responsible to the Minister of Marine for the discharge of its duties and functions. The most important ports are the 5 deep-sea ports of Port Adelaide, Port Pirie, Wallaroo, Port Lincoln, and Thevenard. In South Australia there are also 8 privately-owned and operated ports. The principal of these are Whyalla, Ardrossan, Rapid Bay, and Proper Bay (Broken Hill Pty Co. Ltd), Port Augusta (Commonwealth Railways) and Port Stanvac (Petroleum Refineries (Aust.) Pty Ltd). Maximum depths of water (low water) at the wharves of the main ports range from 27 feet at Port Pirie to 35 feet at Port Adelaide. The following table shows the finances of the Department for 1963–64 to 1967–68.

DEPARTMENT OF MARINE AND HARBORS, SOUTH AUSTRALIA: FINANCES 1963-64 TO 1967-68
($'000)

Year	*Loan indebtedness at 30 June*	*Revenue*	*Expenditure from revenue*			*Surplus*
			Working expenses	*Interest*	*Total*	
1963–64 . . .	40,030	6,114	3,591	1,581	5,172	942
1964–65 . . .	41,393	6,201	3,908	1,679	5,587	614
1965–66 . . .	43,172	6,194	3,941	1,734	5,675	519
1966–67 . . .	44,264	6,734	4,019	1,807	5,827	907
1967–68 . . .	45,478	6,418	4,196	1,869	6,065	352

Western Australia

Fremantle Port Authority. The Port of Fremantle is operated and controlled by the Fremantle Port Authority, a body corporate administered by a Board of five commissioners appointed triennially by the Governor. The port covers an extensive water area of some 180 square miles and comprises an inner and an outer harbour. The inner harbour includes 18 deep-water land-backed berths, providing more than 665,450 square feet of covered storage space and 11,237 feet of wharf berth accommodation. All inner harbour berths are dredged to a low water depth of 36 feet. The outer harbour includes 3 main anchorages, Gage Roads, Owen Anchorage and Cockburn Sound. Deep-water jetties, including the oil refinery jetty in Cockburn Sound, are available in the outer harbour. Ocean-going deep draft ships enter the Sound by means of a channel dredged through Success and Parmelia Banks to a low water depth of 45 feet and a bottom width of 500 feet. In the outer harbour there are 3 tanker berths each with a low water depth of 44 feet at the Kwinana oil refinery, 2 berths at the nearby steelworks jetties with a low water depth of 38 feet, 1 berth at the alumina works jetty with a low water depth of 40 feet and 1 berth at the bulk cargo jetty with a low water depth of 44 feet. There is also a special berth for the handling of explosives. Gross earnings for 1967–68 amounted to $9,638,118, working expenses to $7,270,130, interest charges on loan capital $817,775, sinking fund contributions $224,581, and loan indebtedness totalled $20,279,893.

Albany Harbour Board. The Albany Harbour is controlled by a board of five members appointed by the Government. The depth of water in the entrance channel is 33 feet, at one arm of the jetty 31 feet and at the other arm 33 feet. In the approaches to wharf berths the depth is 33 feet. Berthing accommodation totals 3,615 feet, comprising 1,115 feet at the wharf berths and 2,500 feet at the Deepwater Jetty. Gross earnings for the year 1967–68 amounted to $520,498, working expenses $188,216, interest and sinking fund charges $226,772, and loan indebtedness totalled $3,987,255.

Bunbury Harbour Board. The Bunbury Harbour is controlled by a board of five members appointed by the Government. The depth of water in the harbour is 30 feet and berthing accommodation is 4,808 feet. Gross earnings for the year 1967–68 amounted to $785,020, working expenses $293,675, interest on loan capital $332,376, and loan indebtedness totalled $6,784,108.

Other ports. The following ports are controlled by the State Government Harbour and Light Department: Broome, Busselton, Carnarvon, Derby, Esperance, Geraldton, Onslow, Point Samson, Port Hedland, and Wyndham. Ports privately controlled comprise Yampi and Dampier, both operated by iron ore mining companies, and Exmouth, the port serving the communications installation at North West Cape. A private buoyed sea terminal is operated at Barrow Island for the shipment of crude oil, and private interests ship salt at Useless Loop in Shark Bay.

Tasmania

Marine boards control all Tasmanian ports, except those controlled by the Port of Launceston Authority and the Smithton Harbour Trust. Ports controlled by the seven marine boards are: Hobart, Stanley (Circular Head), Burnie, Devonport, Strahan, Currie (King Island), and Whitemark (Flinders Island). Port Latta (specialised port for the shipment of iron ore pellets) is managed by North-West Iron and Dahlia Mining companies for the Circular Head Marine Board. Hobart, Launceston, Burnie and Devonport are the principal ports in Tasmania. In addition to their interstate and intra-state traffic, they receive considerable overseas shipping. Depths of water at wharves vary, in general, between 16 and 40 feet.

AUTHORITIES CONTROLLING PORTS, TASMANIA: FINANCES
1964-65 TO 1967-68
($'000)

Authority	Loan indebtedness at 30 June (*a*)	*Receipts (revenue account)*		*Expenditure (revenue account)*		Surplus (+) or deficit (−)
		Wharfage charges	*Total*	*Loan charges*	*Total*	
Hobart	2,658	925	1,756	386	1,442	+314
Launceston	3,341	681	1,756	280	1,781	−24
Devonport	5,258	639	1,061	452	909	+152
Burnie	10,443	716	1,204	748	1,147	+56
Circular Head	437	17	68	33	57	+11
King Island	91	37	44	17	39	+5
Strahan	20	34	46	4	46	..
Flinders Island	1	15	17	1	10	+7
Smithton	..	..	1	..	2	−1
Total, 1967–68	**22,249**	**3,064**	**5,953**	**1,921**	**5,433**	**+519**
1966–67	20,361	2,910	5,628	1,646	5,333	+295
1965–66	18,622	2,674	5,541	1,504	5,147	+394
1964–65	17,099	2,542	5,062	1,302	5,015	+47

(*a*) The total of new loans raised during 1967–68 was $2,598,000, of which Hobart raised $350,000, Launceston $450,000, Devonport $700,000, Burnie $850,000, and Circular Head $238,000.

Fire brigades

New South Wales

A Board of Fire Commissioners, consisting of five members, one appointed by the State Government (President) and one each representing insurance companies, local government authorities, volunteer firemen, and permanent firemen, operates under the Fire Brigades Act, 1909–1965, and 163 fire districts had been constituted at the end of 1967. The cost of maintenance of fire brigades is borne in proportions of local councils and the Government each one-eighth, and the insurance companies three-quarters. The Board's borrowing power is limited to $2,000,000.

At 31 December 1967 the actual strength of the Fire Brigade throughout the fire districts of New South Wales was 455 officers and 1,330 permanent and 2,690 volunteer firemen. Corresponding figures for the Sydney Fire District were 374, 1,178 and 297. The revenue for the year 1967 was $9,366,000, as follows; from the Government $1,154,000; municipalities and shires, $1,154,000; fire insurance companies and firms, $6,923,000; and from other sources, $136,000. The disbursements for the year were $9,547,000. The Board of Fire Commissioners provides the fire protection services for Canberra, in the Australian Capital Territory, and the cost of these services is reimbursed by the Commonwealth Government.

Under the Bush Fires Act, 1949–1965 a Bush Fire Fighting Fund exists from which finance is provided for the prevention and fighting of bush fires. Contributions to the Fund by the Government, councils and insurance companies are in the proportion of one-quarter, one-quarter and one-half, respectively. At 30 June 1968 Volunteer Brigades equipped by means of this fund numbered 2,500 with an active membership of about 65,000 persons. The approved expenditure from the Fund for equipment, up to 30 June 1969, amounted to $10,340,000.

Victoria

In Victoria, fire brigades are controlled by the Metropolitan Fire Brigades Board consisting of ten members, including an employees' representative, and the Country Fire Authority consisting of eleven members.

Metropolitan Fire Brigades Board. The Metropolitan Fire Brigades Board receives contributions from the municipalities and the insurance companies in the proportion of one-third and two-thirds respectively. On 30 June 1968 the Board had under its control 45 stations, 1,153 permanent staff, 234 special service and clerical, etc. staff, and 7 part-time firemen. The total receipts for 1967–68 were $6,904,188, comprising contributions $6,053,012, receipts for services $526,859, and interest and sundries $324,317. The expenditure was $6,460,925.

Country Fire Authority. This authority is responsible for the prevention and suppression of fires in the 'country area of Victoria', which embraces the whole of the State outside the Metropolitan Fire District, excluding State forests and certain Crown lands. The country area has been divided into twenty-five fire control regions, four of which (Ballarat, Bendigo, Geelong and the Dandenong, Chelsea and Frankston areas) are wholly urban and the remainder mixed urban and rural. The Country Fire Authority receives contributions in the proportion of two-thirds from insurance companies and one-third from the Treasury. At 30 June 1968 the Country Fire Authority Act applied to 191 insurance companies and 208 urban and 1,048 rural fire brigades. The effective registered strength of the brigades was 117,333 members. Income for the year 1967–68 amounted to $2,952,993. Total expenditure other than loan amounted to $2,764,160.

Queensland

There are two controlling bodies responsible for fire fighting services throughout Queensland. The State Fire Services Council controls brigades set up under *The Fire Brigades Acts* 1964 *to* 1966, and the Rural Fires Board under provisions of *The Rural Fires Act*, 1946 *to* 1968 administers Bush Fire Brigades. In addition a Local Authority may establish a fire fighting brigade of its own as do some major establishments such as the State Forestry Department and private companies whose activities involve fire hazards.

Fire districts are constituted under '*The Fire Brigades Acts*, 1964 *to* 1966'. For each district, there must be a Fire Brigades Board consisting of seven members, and the cost of maintenance of each brigade is proportioned as follows: Treasury one-eighth, insurance companies three-quarters, and local authorities one-eighth. The insurance companies' contribution is paid to the State Government and thence to fire brigades.

At 30 June 1967 there were 84 Fire Brigades Boards. The number of stations was 171 and full-time staff numbered 994, including 21 administrative, 239 officers and 734 firemen. Volunteers numbered 23. Part-time staff numbered 1,284 including 83 administrative, 123 officers and 1,078 firemen. The total revenue for the year 1966–67 was $4,581,300, received mainly from the following sources: Government $550,170, local authorities $550,170, insurance companies $3,301,017. Loan receipts (Government and other) were $538,504. The total expenditure for the year was $4,428,391, the chief items being salaries and wages $3,029,556, and interest and redemption of loans $504,038.

The Rural Fires Board consists of a chairman and six members all appointed by the Governor-in-Council from Government Departments and the Minister of Lands has power to add up to three additional members from the community as a whole. For administrative purposes the State is divided into Rural Fire Districts under the control of a Chief Fire Warden and in these districts Fire Wardens are appointed to assigned areas. These officers co-ordinate and control the Bush Fire Brigades on a voluntary basis. At 30 June 1967 there were 163 Rural Fire Districts with 1,316 Fire Wardens and Bush Fire Brigades numbered 881. Expenditure by the State Government during 1966–67 amounted to $45,544.

South Australia

The Fire Brigades Act, 1936–1958 provides for a board of five members, that the expenses and maintenance of brigades are defrayed in the proportion of two-ninths by the Treasury, five-ninths by insurance companies and two-ninths by the municipalities concerned, and that when the Treasury proportion exceeds its statutory contribution of approximately $27,000, the excess is borne five-sevenths by insurance companies and two-sevenths by the municipalities. At 30 June 1968 there were altogether 37 fire brigade stations, of which 15 were metropolitan and 22 country.

The strength of the permanent staff at 30 June 1968 was 509, including 387 officers and men, 90 country auxiliary firemen and 32 other employees (including maintenance workers). The total revenue for the year 1967–68 was $1,669,902, including contributions of $1,447,299 made up as follows: insurance companies $871,079, Treasury $227,788 and municipalities $348,432. The Treasury contribution includes a special grant of $198,970.

Western Australia

By the provisions of the *Fire Brigades Act, 1942–1966* certain local government areas are constituted fire districts under the control of the Western Australian Fire Brigades Board. There were 56 fire districts at 30 June 1968. The contribution to the Board is made in the proportion of 16 per cent from the Government, 20 per cent from local government authorities, and 64 per cent from insurance companies. The number of local government authorities and insurance companies who contributed numbered 77 and 177 respectively. The brigades throughout the State controlled by the Western Australian Fire Brigades Board at 30 June 1968 numbered 75, with a staff of 1,748 including 349 permanent officers and firemen and 1,399 volunteer brigade officers and firemen. The revenue for nine months of the year ended 30 June 1968 was $1,622,107 and the expenditure $1,647,667.

Under the *Bush Fires Act, 1954–1965* a Bush Fires Board, consisting of thirteen members, six of whom are nominated by the Country Shire Councils' Association, was set up to advise the Minister for Lands on bush fire control. The Act also provides for the registration of bush fire control officers, who numbered 2,204 at 30 June 1968, and the establishment of bush fire brigades, 930 at 30 June 1968. Many individual brigades are large organisations with numerous self-contained sections.

Tasmania

The *Fire Brigades Act* 1945 provided for the creation of the Fire Brigades Commission of Tasmania to co-ordinate the activities of existing fire brigade boards, while leaving the responsibility for individual control and management with the boards. The Commission consists of two persons nominated by the Minister, one person elected by the City or Municipal Councils' representatives and three persons elected by the insurance representatives of the Fire Brigades Boards. Contributions towards the cost of operations are on the basis of 22.5 per cent each from the Treasury and the municipalities and 55 per cent from the insurance companies concerned. The cost for the year 1967–68 amounted to $808,478. There were, at 30 June 1968, 23 boards controlling 36 stations, and their aggregate staffs numbered 617 (officers and firemen), including 193 permanent firemen, 384 part-time firemen and 40 volunteers; the volunteers all operate under the Hobart Board in the forested and mountainous Fern Tree area.

CHAPTER 21

RURAL INDUSTRY

This chapter is divided into four major parts:

Introduction, dealing with the disposal of Crown lands, closer settlement and war service settlement and general rural activity in Australia;

Agricultural production;

Pastoral production; and

Other rural industries, which includes the dairying, poultry and bee industries.

For greater detail on the subjects dealt with in this chapter *see* the annual bulletins *Rural Industries, Value of Production*, and *Manufacturing Commodities* (regarding butter, cheese, etc., factories) issued by this Bureau. Current information on commodities produced is obtainable in the *Quarterly Summary of Australian Statistics, Monthly Review of Business Statistics, Monthly Bulletin of Production Statistics*, and *Digest of Current Economic Statistics* (monthly). The series of bulletins *Classification of Rural Holdings by Size and Type of Activity* (*see* page 819) shows particulars of rural holdings classified by size, nature and area of crops, and numbers of livestock, and also according to main type of activity. The mimeographed annual *Report on Food Production and the Apparent Consumption of Foodstuffs and Nutrients in Australia* contains details of the production and utilisation of foodstuffs. The following mimeographed publications also contain considerable detail on the particular subjects dealt with.

General. *Value of Production and Indexes of Price and Quantum of Farm Production* (annual), *Value of Primary Production* (*Preliminary Statement*) (annual), *Value of Primary Production* (*Preliminary Estimates*) (annual), *Farm Machinery on Rural Holdings* (annual), *Tractors on Rural Holdings, 31 March 1966* (detailed information, triennial), *Grain and Seed Harvesters on Rural Holdings, 31 March 1967* (detailed information, triennial), *New Tractors: Receipts, Sales and Stocks* (quarterly), and *New Agricultural Machinery* (quarterly).

Agricultural production. *Rural Land Use and Crop Production* (annual), *Agricultural Statistics* (*Preliminary Statement*) (annual), *The Wheat Industry* (two a year), *The Fruit Growing Industry* (annual), and *Fruit Statistics* (*Preliminary Statement*) (annual).

Pastoral production. *Livestock Statistics* (annual), *Livestock Numbers* (annual), *The Meat Industry* (monthly), *Wool Production* (annual), and *Wool Production and Utilisation* (annual).

Other rural production. *The Dairying Industry* (monthly and half-yearly), *Livestock Statistics* (annual), *Livestock Numbers* (annual), *Chicken Hatchings and Poultry Slaughterings* (monthly), *Manufacturing Industries No. 20—Bacon Curing* and *No. 21—Butter, Cheese and Condensed, Concentrated, etc., Milk* (annual), *Production Summaries No. 36—Preserved Milk Products* and *No. 55.—Butter and Cheese* (monthly), and *Bee-farming* (annual).

Detailed particulars of the early development of various aspects of Australian rural industry are given in previous issues of the Year Book up to No. 53 (*see*, for example No. 53, pages 885, 888, 891–2).

Throughout this chapter yearly periods for area and production of crops relate to years ended 31 March. Other periods in respect of e.g. factory and trade statistics relate to years ended 30 June.

INTRODUCTION

Disposal of Crown lands

Land legislation and tenures

The following sections contain figures showing the extent of the different land tenures in the several States and Territories, classified under broad headings indicating the nature of the tenure, together with some general descriptive matter. Information in greater detail, descriptions of the land tenure systems of the several States and the internal Territories, and conspectuses of land legislation in force and of the systems of land tenure were provided in Year Book No. 48 and previous issues (*see also* Year Book No. 50, page 85 and List of Special Articles, etc. preceding General Index to this Volume).

Free grants and reservations

Provision exists in all States except Tasmania for the disposal of Crown lands for public purposes by free grants, and in all States for the temporary and or permanent reservation of Crown lands for public purposes. In the Northern Territory any Crown lands not subject to any right of, or contract for, purchase may be resumed for public purposes, and the whole or any portion of the lands resumed may be reserved for that purpose. In the Australian Capital Territory, under the *Seat of Government (Administration) Act* 1910, Crown lands may not be sold or disposed of for any estate in freehold except in pursuance of some contract entered into before the commencement of the Act.

AREAS OF CROWN LANDS RESERVED: STATES AND TERRITORIES, 1964 TO 1968
('000 acres)

Year	*N.S.W.* (*a*)	*Vic.* (*b*)	*Qld* (*b*)	*S.A.* (*a*)	*W.A.* (*a*)	*Tas.* (*a*)	*N.T.* (*a*)	*Total* (*c*)
1964 . .	15,931	8,847	25,234	22,764	76,450	4,852	60,903	214,981
1965 . .	15,943	8,861	25,451	22,802	78,088	4,861	60,903	216,909
1966 . .	15,937	8,874	25,662	22,878	78,226	4,913	60,922	217,412
1967 . .	15,875	8,921	27,240	22,878	80,491	4,938	60,974	221,317
1968 . .	15,872	8,952	27,833	22,919	80,658	5,327	60,988	222,549

(*a*) At 30 June. (*b*) At 31 December. (*c*) Excludes the Australian Capital Territory.

The purposes for which areas were reserved are given hereunder for the latest years available as set out in the table above.

New South Wales. For travelling stock, 4,941,904 acres; forest reserves, 1,490,014 acres; water and camping reserves, 768,098 acres; mining reserves, 1,027,414 acres; recreation and parks, 730,318 acres; other reserves, 6,913,841 acres; total, 15,871,589 acres.

Victoria. For roads, 1,707,565 acres; water reserves, 315,494 acres; forest and timber reserves, 5,818,285 acres; mallee reserves, 410,000 acres; other reserves, 701,121 acres; total, 8,952,465 acres.

Queensland. For timber reserves, 1,775,192 acres; State forests and national parks 9,482,138 acres; Aboriginal reserves, 6,978,443 acres; streets, surveyed roads and stock routes, 4,195,343 acres; general reserves, 5,401,386 acres; total, 27,832,502 acres.

South Australia. Total area of surveyed roads, railways and other reserves, 22,919,170 acres, including 18,833,822 acres set apart as Aboriginal reserves.

Western Australia. For State forests, 4,451,351 acres; timber reserves, 1,864,637 acres; other reserves 74,341,945 acres; total, 80,657,933 acres.

Tasmania. For forest reserves, 4,304,000 acres; national parks, 1,023,000 acres; total, 5,327,000 acres.

Northern Territory. For Aboriginal, defence and public requirements, 60,988,000 acres.

Conditional and unconditional purchases of freehold

Crown lands in the States may be disposed of by unconditional purchase at public auction or by certain other forms of purchase (for details *see* Year Book No. 48, pages 91–2). Conditional purchases of various types may also be made. In the Northern Territory only 0.1 per cent of the total area is alienated, the remainder being held under lease or licence, or reserved for various purposes or unoccupied. In the Australian Capital Territory about 16 per cent of the area is alienated or in process of alienation in consequence of contracts existing prior to the establishment of the Territory.

Leases and licences

Well over half the area of the States of New South Wales and South Australia and of the Northern Territory and more than four-fifths of that of Queensland are occupied under some form of lease or licence. In Victoria, only about one-tenth of the area is leased or licensed, more than half being alienated; in Western Australia, more than one-third is leased or licensed, most of the remainder being unoccupied; in Tasmania about one-quarter is leased or licensed, while about one-third of the area of the State is occupied by the Crown or unoccupied, and the remainder alienated. Areas leased or licensed in the States are held under Crown lands Acts, closer settlement Acts, mining Acts, etc., and in the Territories under various Ordinances.

Land Acts and Ordinances. The types of lease and licence which obtain under land legislation cover a wide range, and vary with each State or Territory. The following are examples: grazing or pastoral, settlement and closer settlement, settlement purchase, conditional and unconditional purchase, perpetual and Crown; however, the variations of these forms and the special forms of lease and licence which exist would extend this list considerably. Details of the various types in existence are given in Year Book No. 48, pages 93–4, and some detail is included in the tables on pages 878–81 of Year Book No. 53.

AREAS OCCUPIED UNDER LEASE OR LICENCE OTHER THAN MINING AND FORESTRY: STATES AND TERRITORIES, 1964 TO 1968
('000 acres)

Year	N.S.W. (a)	Vic. (b)	Qld (b)	S.A. (a)	W.A. (a)	Tas. (a)	N.T. (a) (c)	A.C.T. (a) (c)	Total
1964	111,386	6,147	367,209	146,382	242,309	1,062	191,436	285	1,066 216
1965	111,567	6,263	365,318	147,661	241,911	984	191,840	282	1,065,826
1966	111,262	6,269	362,866	150,422	241,662	933	190,688	279	1,064,381
1967	111,300	5,993	359,152	149,192	244,715	915	194,543	262	1,066,072
1968	110,499	(d)5,856	353,163	149,530	244,804	766	191,595	254	1,056,467

(a) Year ended 30 June. (b) Year ended 31 December. (c) Leases and licences for all purposes. (d) Includes 75,000 acres of reserved Crown lands held under grazing licences.

Closer settlement and war service settlement

Closer settlement

Particulars of the methods of acquisition and disposal of land for the closer settlement of civilians and returned service personnel (1914–18 War) in the several States are given in issues of the Year Book up to No. 22 (*see* No. 22, pages 163–9), and the results of the operations of the several schemes have appeared in subsequent issues in considerable detail. However, the amalgamation in some States of closer settlement records with those of other authorities has since made it impossible to obtain up-to-date figures for those States and for Australia as a whole. Page 96 of Year Book No. 48 contains particulars as at 30 June 1960 of the areas and costs for those States for which separate information is available.

War Service Land Settlement Scheme

The War Service Land Settlement Scheme provides for the settlement on the land of eligible ex-servicemen from the 1939–45 War and the Korea-Malaya operations. Finance for capital expenditure under the scheme in South Australia, Western Australia and Tasmania and for special loans to New South Wales and Victoria is provided through Loan (War Service Land Settlement) Acts. Finance for other aspects of the scheme in all States is provided by annual parliamentary appropriation. The *States Grants (War Service Land Settlement) Act* 1952 provides that the responsible Commonwealth Minister may make grants of financial assistance to the States under such terms as he may from time to time determine.

New South Wales, Victoria and Queensland agreed, at the inception of the scheme, to find their own finance for the acquisition and development of properties. In 1954 Queensland abandoned the scheme and made available for general settlement all unallotted lands held under it. Detailed information about the agreements and the methods of operation and administration of the scheme are contained in earlier Year Books (*see* List of Special Articles, etc., preceding General Index to this volume).

WAR SERVICE LAND SETTLEMENT: SUMMARY, STATES, TO 30 JUNE 1968

State	Land acquired	Farms allotted		Farms in course of development		Other
	acres	No.	acres	No.	acres	acres
New South Wales	9,094,021	3,047	9,094,021	..	..	..
Victoria	1,181,599	3,048	1,181,599	..	..	..
Queensland	398,524	470	218,640	..	..	(a)179,884
South Australia	755,873	1,021	690,225	..	..	(b)65,648
Western Australia	2,053,972	1,010	1,905,475	..	..	(b)148,497
Tasmania	449,629	552	439,745	..	..	(b)9,884
Total	**13,933,618**	**9,148**	**13,529,705**	..	..	**403,913**

(a) War Service Land Settlement was discontinued in 1954, and unallotted lands were made available for general settlement. (b) Includes land disposed of outside the scheme and discrepancies to be corrected upon survey.

Particulars of expenditure on war service land settlement are given in Chapter 19, Public Finance (*see* pages 716–7).

Alienation and occupation of Crown lands

Detailed particulars of the alienation and occupation of Crown lands in the several States and Territories are given in previous issues of the Year Book up to No. 53 (*see* No. 53, pages 878–81).

The following table provides a summary for each State and Territory, and for Australia as a whole, of the alienation and occupation of Crown lands in 1968.

ALIENATION AND OCCUPATION OF CROWN LANDS: STATES AND TERRITORIES, 1968

	Private lands				*Crown lands*				
	Alienated		*In process of alienation*		*Leased or licensed*		*Other (a)*		*Total area*
State or Territory	*'000 acres*	*Per cent*	*'000 acres*	*Per cent*	*'000 acres*	*Per cent*	*'000 acres*	*Per cent*	*'000 acres*
N.S.W.(*b*) .	61,700	31.2	4,805	2.4	112,299	56.7	19,233	9.7	198,037
Vic.(*c*) . .	32,156	57.2	2,140	3.8	5,781	10.3	16,168	28.7	56,246
Qld(*d*) . .	26,793	6.3	19,620	4.6	355,780	83.3	24,687	5.8	426,880
S.A.(*b*) . .	15,942	6.6	310	0.1	149,530	61.5	77,463	31.8	243,245
W.A.(*b*) . .	32,608	5.2	15,435	2.5	249,133	39.9	327,413	52.4	624,589
Tas.(*b*) . .	6,651	39.4	229	1.4	4,292	25.4	5,713	33.8	16,885
N.T.(*b*) . .	319	0.1	. .	. .	191,595	57.5	141,065	42.4	332,979
A.C.T.(*b*)(*e*) .	89	14.8	9	1.4	254	42.3	249	41.5	601
Australia .	**176,258**	**9.3**	**42,548**	**2.2**	**1,068,664**	**56.3**	**611,991**	**32.2**	**1,899,462**

(*a*) Occupied by Crown; reserved; unoccupied; unreserved. (*b*) At 30 June (*c*) At 31 December 1967. (*d*) At 31 December 1968. (*e*) Includes Jervis Bay area.

Number and area of rural holdings

Number and area

A holding in Australia has been defined by statisticians on a more or less uniform basis, and discrepancies which exist are not of sufficient importance to prevent comparisons. For the purpose of these statistics a holding has been defined as land of one acre or more in extent used in the production of agricultural produce or for the raising of livestock and the production of livestock products.

There are considerable fluctuations from time to time in the numbers of very small holdings, and it is very difficult to determine in some cases whether or not they are rural holdings within the definition. In addition, in the very dry parts, such as the far west of New South Wales and Queensland and the remoter parts of South Australia and Western Australia, there are large areas of marginal lands sporadically occupied for extensive grazing under short-term lease or other arrangement, and the areas so occupied tend to fluctuate with the seasons. Similarly, there are rugged areas in the mountain country of some States which are also occasionally occupied.

RURAL HOLDINGS: NUMBER AND AREA, STATES AND TERRITORIES, 1963-64 TO 1967-68

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
NUMBER OF RURAL HOLDINGS									
1963–64 .	77,339	69,775	43,183	28,711	22,770	10,949	299	214	253,240
1964–65 .	77,098	69,737	43,565	28,754	22,856	10,979	307	207	253,503
1965–66 .	76,152	69,199	43,914	28,759	22,853	10,777	305	203	252,162
1966–67 .	76,251	68,466	43,858	28,957	23,181	10,641	304	200	251,858
1967–68 .	76,225	(*a*)72,802	43,694	29,058	23,116	10,631	305	196	(*b*)256,027
TOTAL AREA OF RURAL HOLDINGS ('000 acres)									
1963–64 .	172,076	37,798	376,687	158,905	266,556	6,377	165,734	373	1,184,506
1964–65 .	172,148	37,844	377,010	156,955	268,553	6,420	171,482	358	1,190,770
1965–66 .	171,200	37,844	380,325	159,394	270,054	6,496	175,862	355	1,201,531
1966–67 .	171,652	38,653	379,977	161,510	274,765	6,507	170,018	350	1,203,431
1967–68 .	171,767	(*a*)39,564	380,993	160,765	275,334	6,579	174,385	350	*b*1,209,737

(*a*) New Series. The lists of land holdings used in the collection of agricultural and pastoral statistics in Victoria have been reconciled with lists of rateable land of one acre or more in extent as recorded by municipalities for rating purposes. This has resulted in an increase in number and area of holdings in the 1967–68 collection. (*b*) *See* footnote (*a*).

Land utilisation of rural holdings

The following table shows the purposes for which the land on the rural holdings referred to in the preceding paragraph was used.

RURAL HOLDINGS: LAND UTILISATION, 1963-64 TO 1967-68

('000 acres)

Year	*Area used for crops (a)*	*Land lying fallow(b)*	*Area under sown grasses and clovers(c)*	*Balance of holdings (d)*	*Total area of holdings*
1967–68—					
New South Wales	12,845	2,865	10,475	145,582	171,767
Victoria(*e*)	5,641	2,647	16,725	14,552	39,564
Queensland	4,777	843	4,655	370,718	380,993
South Australia	6,319	1,063	5,999	147,384	160,765
Western Australia	8,883	1,846	14,528	250,078	275,334
Tasmania	257	77	1,842	4,403	6,579
Northern Territory	6	. .	68	174,311	174,385
Australian Capital Territory	7	1	82	259	350
Australia	**38,735**	**9,340**	**54,374**	**1,107,287**	**1,209,737**
1966–67	37,087	9,784	51,471	1,105,090	1,203,431
1965–66	32,798	10,471	48,519	1,109,742	1,201,531
1964–65	32,251	8,466	47,159	1,102,894	1,190,770
1963–64	29,948	8,510	44,211	1,101,837	1,184,506

(*a*) Excludes (i) duplication on account of area double cropped, except for New South Wales and South Australia, and (ii) clovers and grasses cut for hay and seed which have been included in Area under sown grasses and clovers, and differs therefore from crop area figures shown later in this chapter. (*b*) Excludes short or summer fallow. (*c*) Includes paspalum. (*d*) Used for grazing, lying idle, etc. (*e*) *See* footnote (*a*) to previous table.

Classification by size and type of activity

Some of the information obtained from the 1965–66 Agricultural and Pastoral Census has been classified by size of principal characteristics (area of holdings, area of sown grasses and clovers, area of selected crops, and numbers of livestock). In addition, all holdings have been classified according to type of activity. Tables showing this information, for statistical divisions and States, and an outline of the methods used have been published in a series of bulletins *Classification of Rural Holdings by Size and Type of Activity*, 1965–66. Similar information was published in a series of bulletins for the year 1959–60. A size classification for each State is available for the year 1955–56.

Employment on rural holdings

Persons engaged

The following table shows, for each State and Territory, the recorded number of males working on rural holdings. Particulars for females are not available except for New South Wales and Victoria. Additional particulars relating to the number of males employed in agriculture up to 1941–42 are shown in Year Book No. 36, page 852, and previous issues. Similar details for later years are not available.

MALES(*a*) ENGAGED ON RURAL HOLDINGS: STATES AND TERRITORIES, 31 MARCH 1968

Males engaged	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Permanent—									
Owners, lessees or share-farmers . . .	62,791	58,171	44,909	21 737	19,132	7,158	337	110	214,345
Relatives of owner, lessee or share-farmer, over 14 years of age, not receiving wages or salary .	2,200	4,365	2,567	419	1,206	..	57	11	10,825
Employees, including managers and relatives working for wages or salary .	27,802	14,518	17,266	7,568	9,332	4,051	1,183	162	81,882
Total permanent males .	*92,793*	*77,054*	*64,742*	*29,724*	*29,670*	*11,209*	*1,577*	*283*	*307,052*
Temporary	22,296	16,393	13,943	9,862	(*b*)	4,621	486	22	(*b*)
Total males	**115,089**	**93,447**	**78,685**	**39,586**	(*b*)	**15,830**	**2,063**	**305**	(*b*)

(*a*) Details for females not available except for New South Wales and Victoria. (*b*) Not available for publication.

Information regarding the number of persons (males and females) working full-time on rural holdings in Australia at 31 March of years to 1958 appears in Year Book No. 50, page 987, and in earlier Year Books. Data for subsequent years are the subject of investigation and are not available at this stage.

Salaries and wages paid

Particulars of salaries and wages paid to employees (including amounts paid to contractors) working full-time on rural holdings are shown below for the year 1967–68. Data for New South Wales, and hence Australia, are not available.

EMPLOYEES ON RURAL HOLDINGS: SALARIES AND WAGES PAID(*a*) STATES AND TERRITORIES, 1967-68
($'000)

Employees	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Males and females—									
Permanent . . .	(*b*)	29,699	37,725	15,410	20,036	8,530	2,510	348	n.a.
Temporary(*c*) . . .		26,170	48,201	12,499	18,251	5,397	421	126	
Total		**55,870**	**85,926**	**27,909**	**38,287**	**13,927**	**2,931**	**474**	

(*a*) Includes value of keep. (*b*) Not available; subject to investigation. (*c*) Includes amounts paid to contractors.

Similar information for Australia for years up to 1957–58 is given in Year Book No. 50, page 988, and in earlier Year Books. Particulars for subsequent years are the subject of investigation and are not available at this stage.

Persons residing permanently on holdings

Particulars of persons (of all ages) residing permanently on rural holdings in each State and Territory at 31 March 1968, and throughout Australia for a series of years, are as follows.

PERSONS (OF ALL AGES) RESIDING PERMANENTLY ON RURAL HOLDINGS STATES AND TERRITORIES, 31 MARCH 1968

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W A.*	*Tas.*	*N.T.(a)*	*A.C.T.*	*Aust.*
Males . .	153,514	137,749	100,591	56,992	49,956	23,466	2,977	509	525,754
Females .	133,497	122.639	83,569	50,411	41,336	21,164	2,030	404	455 050
Total .	**287,011**	**260,388**	**184,160**	**107,403**	**91,292**	**44,630**	**5,007**	**913**	**980,804**

(*a*) Includes Aborigines.

PERSONS (OF ALL AGES) RESIDING PERMANENTLY ON RURAL HOLDINGS
AUSTRALIA, 31 MARCH 1964 TO 1968

	31 March—				
	1964	*1965*	*1966*	*1967*	*1968*
Males	541,394	538,496	533,039	529,378	525,754
Females	465,990	464,416	461,683	457,507	455,050
Total	**1,007,384**	**1,002,912**	**994,722**	**986,885**	**980,804**

Farm machinery on rural holdings

The tables following show data for the principal types of farm machinery on rural holdings in the several States and Territories at 31 March 1968 and throughout Australia for a series of years. A more detailed analysis of tractors on rural holdings according to horse-power, type of fuel used, and age of tractor has been published in the Statistical Bulletin *Tractors on Rural Holdings—Australia, 31 March* 1966. Details of grain and seed harvesters on rural holdings at 31 March 1967, classified according to type of propulsion, width of cut, age and type of front have been published in the statistical bulletin: *Grain and Seed Harvesters on Rural Holdings, 31 March 1967.*

FARM MACHINERY ON RURAL HOLDINGS: STATES AND TERRITORIES, 31 MARCH 1968

Machinery	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Cultivating—									
Rotary hoes and rotary tillers—									
Self-contained power unit .	9,157	8,016	3,153	3,718	1,793	1,284	53	n.a.	(*a*)27,174
Tractor-mounted or trailing type .	6,946	5,096	3,940	1,879	1,517	927	28		(*a*)20,333
Seeding and planting—									
Grain drills—									
Combine type . .	28,621	20,380	13,937	15,665	13,942	1,426	59	64	94,094
Other types . .	5,911	9,187	2,423	5,240	4,315	2,518	10	30	29,634
Maize and cotton planters . . .	7,307	750	5,676	..	73	..	16	4	13,826
Fertiliser distributors and broadcasters .	23,836	30,560	15,454	9,710	10,086	6,060	42	105	95,853
Harvesting—									
Grain and seed headers and harvesters (*b*)									
Self-propelled .	4,321	1,561	2,773	1,864	1,325	109	n.a.	(*c*)	(*a*)11,953
Tractor drawn .	16,776	12,995	5,126	10,041	10,341	617		(*d*)33	(*a*)55,929
Agricultural mowers—									
Reciprocating types—									
Power-driven .	20,286	29,559	8,036	9,726	7,327	5,134	47	87	80,202
Ground-drive .	1,497	2,398	2,779	962	416	664	13	8	8,737
Rotary types . .	7,503	8,969	6,927	1,626	2,276	1,197	51	35	28,584
Hay rakes—									
Side delivery . .	13,510	17,088	4,984	6,382	4,945	2,543	37	51	49,540
Buck . . .	2,308	4,155	2,896	1,107	314	983	7	10	11,780
Dump . . .	3,158	3,433	5,835	1,103	684	848	5	11	15,077
Pick-up balers . .	11,245	13,173	2,978	4,992	3,845	1,903	24	51	38,211
Potato diggers . .	1,608	2,541	1,167	721	455	958	..	n.a.	(*a*)7,450
Forage harvesters .	2,519	1,951	1,330	845	558	317	15	10	7,545
Peanut pickers . .	n.a.	..	428	..	..	..	13	..	(*a*)441
Corn pickers . .	315	78	832	..	..	..	..	..	1,225
Other—									
Shearing machines (number of stands) .	73,434	43,596	18,791	29,786	24,799	4,824	15	297	195,542
Milking machines (number of units) .	40,862	109,137	38,208	18,399	9,317	16,968	40	91	233,022
Tractors (wheel and crawler)(*e*) . .	86,999	81,766	70,249	36,590	35,158	12,664	345	211	323,982
Hammer mills . .	7,927	5,922	8,035	2,771	1,921	635	..	n.a.	(*a*)27,211

(*a*) Incomplete. (*b*) Excludes reapers, binders, specialised clover harvesters and forage harvesters. (*c*) Included with tractor drawn types. (*d*) All types. (*e*) *See* text above.

FARM MACHINERY ON RURAL HOLDINGS: AUSTRALIA 31 MARCH 1964 TO 1968

Machinery	31 March—				
	1964	1965	1966	1967	1968
Cultivating—					
Mouldboard ploughs(*a*)—					
Trailing type	60,506	n.a.	n.a.	46,450	n.a.
Tractor-mounted type	41,722			42,219	
Disc implements (including disc ploughs, disc cultivators, disc tillers and disc harrows)(*a*)—					
Trailing type	156,143			136,649	
Tractor-mounted type	73,675			71,601	
Tyne implements(*a*)—					
Chisel ploughs, scarifiers, cultivators and rippers—					
Trailing type	98,180			97,146	
Tractor-mounted type	77,748			93,862	
Tyne harrows (number of leaves)—					
Trailing type	448,626			464,084	
Tractor-mounted type	62,720			93,615	
Rotary hoes and rotary tillers—					
Self-contained power unit	(*b*)37,561	(*b*)40,195	45,267	27,788	27,174
Tractor-mounted or trailing type				17,881	20,333
Seeding and planting—					
Grain drills—					
Combine type	117,271	90,008	90,866	92,530	94,094
Other types		30,537	30,401	29,605	29,634
Maize and cotton planters	(*c*)14,635	15,220	14,523	14,260	13,826
Fertiliser distributors and broadcasters	84,320	86,653	86,409	93,064	95,853
Harvesting—					
Grain and seed headers and harvesters—					
Self-propelled	64,697	65,568	64,744	10,273	11,953
Tractor drawn				54,644	55,929
Agricultural mowers(*a*)—					
Reciprocating types—					
Power-driven	n.a.	81,410	n.a.	n.a.	80,202
Ground-drive		17,153			8,737
Rotary types		n.a.			28,584
Hay rakes(*a*)—					
Side delivery	n.a.	42,832	n.a.	n.a.	49,540
Buck		11,917			11,780
Dump		16,564			15,077
Pick-up balers	30,411	32,278	34,229	36,688	38,211
Potato diggers(*a*)	n.a.	6,613	n.a.	n.a.	7,450
Forage harvesters	5,509	5,676	6,385	7,214	7,545
Peanut pickers	n.a.	315	371	396	441
Corn pickers(*a*)	n.a.	1,246	n.a.	n.a.	1,225
Other—					
Shearing machines (number of stands)	180,370	186,393	188,496	193,226	195,542
Milking machines (number of units)	229,042	231,389	233,625	235,325	233,022
Tractors—					
Wheel	283,748	295,502	278,118	314,670	323,982
Crawler			22,741		
Hammer mills(*a*)	n.a.	22,128	n.a.	n.a.	27,211

(*a*) Details for all States are collected at triennial intervals only. (*b*) Incomplete; excludes tractor-drawn rotary hoes and rotary tillers in Queensland. (*c*) Incomplete; particulars for Victoria not available.

The soils of Australia

Year Book No. 52 contains an article (pages 873–9) on the soils of Australia which deals with the following matters: nature and development of Australian soils, including the agricultural development of soils, and types of Australian soils. A soil map of Australia and illustrations are included on plates 47 to 51 of Year Book No. 52.

Soil improvement and conservation

Fertilisers

The Australian output of prepared fertilisers is derived chiefly from imported rock phosphate. Complete information regarding local production of fertilisers is not available. The number of firms engaged in the manufacture of chemical fertilisers in Australia for the year 1967–68 was 48 made up as follows: New South Wales, 13; Victoria, 6; Queensland, 4; South Australia, 10; Western Australia, 9; and Tasmania, 6. The production of superphosphate in Australia during 1967–68 amounted to 3,935,000 tons.

Information regarding the area treated with artificial fertilisers and the quantity of artificial fertilisers (superphosphate, bonedust, nitrates, etc.) used in each State during the 1967–68 season is given in the following table.

AREA FERTILISED AND QUANTITY OF ARTIFICIAL FERTILISERS USED STATES AND TERRITORIES, 1967-68

	Crops			*Pastures*			*Total*		
State or Territory	*Area fertilised*	*Super-phosphate used*	*Other artificial fertilisers used*	*Area fertilised*	*Super-phosphate used*	*Other artificial fertilisers used*	*Area fertilised*	*Super-phosphate used*	*Other artificial fertilisers used*
	'000 acres	tons	tons	'000 acres	tons	tons	'000 acres	tons	tons
New South Wales	7,555	275,976	77,066	9,697	514,444	25,983	17,252	790,420	103,049
Victoria . .	4,961	225,085	63,661	11,359	680,231	99,629	16,319	905,315	163,290
Queensland . .	1,242	34,635	198,766	260	24,324	5,734	1,502	58,960	204,500
South Australia .	5,033	272,964	19,436	5,130	302,513	4,964	10,163	575,477	24,400
Western Australia	8,868	472,304	53,650	12,597	676,535	17,479	21,465	1,148,839	71,129
Tasmania . .	244	24,945	12,263	1,561	126,813	8,175	1,805	151,757	20,438
Northern Territory	14	1,097	568	47	2,883	81	60	3,980	649
Australian Capital Territory . .	6	326	94	44	2,256	19	50	2,582	113
Australia .	**27,922**	**1,307,332**	**425,504**	**40,693**	**2,329,999**	**162,064**	**68,615**	**3,637,330**	**587,568**

Particulars of the quantity of artificial fertilisers used in each State and Territory during each of the seasons 1963–64 to 1967–68 are shown in the next table. These details include the quantity used for the top-dressing of pasture lands.

QUANTITY OF ARTIFICIAL FERTILISERS USED: STATES AND TERRITORIES 1963-64 TO 1967-68

(Tons)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1963–64	683,968	880,941	183,326	465,583	720,943	141,507	305	5,213	3,081,786
1964–65	837,959	988,106	198,696	528,827	844,455	142,660	307	5,225	3,546,235
1965–66	839,955	1,054,393	214,487	561,962	972,432	163,925	672	3,777	3,811,603
1966–67	864,569	1,113,392	242,615	598,808	1,096,555	169,756	681	3,393	4,089,769
1967–68	893,469	1,068.605	263,460	599,877	1,219,968	172,195	4,629	2,695	4,224,898

The chief sources of Australia's supplies of natural phosphate are Nauru, Christmas Island (Indian Ocean) and the United States of America. Sodium nitrate is obtained chiefly from Chile.

ARTIFICIAL FERTILISERS: IMPORTS INTO AUSTRALIA, 1963-64 TO 1967-68

Fertiliser	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
	QUANTITY ('000 cwt)				
Ammonium fertilisers	2,533	1,565	1,311	1,973	2,893
Potassium fertilisers	1,935	2,180	2,163	2,398	2,602
Natural phosphate	39,788	50,346	55,901	65,436	65,916
Sodium nitrate	193	221	153	99	161
Other	337	746	335	885	887
Total	**44,786**	**55,058**	**59,862**	**70,791**	**72,458**
	VALUE ($'000 f.o.b.)				
Ammonium fertilisers	3,934	3,132	2,841	4,161	5,016
Potassium fertilisers	2,856	3,441	3,550	3,875	3,770
Natural phosphate	12,486	17,978	21,543	29,050	32,162
Sodium nitrate	478	443	393	249	390
Other	1,092	2,532	1,181	2,698	3,219
Total	**20,846**	**27,526**	**29,508**	**40,033**	**44,557**

Exports of fertilisers (manufactured locally) amounted to 32,000 cwt valued at $166,000 in 1967–68 compared with 20,000 cwt valued at $93,000 in 1966–67.

Aerial agriculture

Extensive use is made of aircraft for top-dressing and seeding, for spraying and dusting of crops and pastures, and for pest and vermin extermination.

For 1956–57 (the first year for which data are available) the total area treated was 1,466,000 acres; in 1967–68 the total was 14,348,000 acres. The following table shows details of area treated and materials used for each State for the five years ended 31 March 1968.

AERIAL AGRICULTURE, 1963-64 TO 1967-68

Year ended 31 March	*Area topdressed and seeded*	*Area sprayed*	*Total area treated (a)*	*Materials used*		*Total flying time*
				Superphosphate	*Seed*	
1968—	'000 acres	'000 acres	'000 acres	tons	'000 lb	hours
New South Wales(*b*)	6,418	990	7,716	308,786	(*c*)	53,241
Victoria	(*c*)	266	1,803	(*c*)	310	15,124
Queensland(*d*)	(*c*)	(*c*)	1,030	15,741	626	(*c*)
South Australia	(*c*)	237	(*c*)	(*c*)	217	5,609
Western Australia	(*c*)	(*c*)	(*c*)	46,826	201	15,072
Tasmania	(*c*)	(*c*)	(*c*)	(*c*)	(*c*)	(*c*)
Australia	**10,495**	(*c*)	**14,348**	**524,374**	**3,249**	**102,112**
1967	11,646	3,192	15,237	596,628	2,407	108,688
1966	11,314	3,469	15,010	588,045	1,581	108,850
1965	14,147	2,416	16,640	656,094	3,467	108,753
1964	10,666	2,041	12,788	505,811	1,997	84,827

(*a*) Includes other types of treatment (rabbit baiting, etc.). (*b*) Includes details for the Australian Capital Territory. (*c*) Not available for publication. (*d*) Includes details for the Northern Territory.

Pasture improvement

An article on pasture improvement, which includes notes on indigenous and introduced species of grasses and which traces the development of pasture research in Australia, appears on pages 1001–2 of Year Book No. 49.

Soil conservation

Year Book No. 49 contains an article (pages 1003–4) on soil conservation which deals with the following matters: land use and soil erosion, agents of erosion, prevention and control, and the activities of various Commonwealth and State authorities which promote and co-ordinate research into the problems of soil erosion and the initiation of preventive measures.

AGRICULTURAL PRODUCTION

In general, statistics in this chapter relating to agricultural production are derived from 'census' returns supplied by approximately 256,000 farmers who utilise one acre or more of land for agricultural or pastoral purposes. The latest figures available are those for the year 1967–68. The returns are collected on a substantially uniform basis in all States at 31 March each year, and relate mainly to crops sown in the previous twelve months. Where harvests are not completed by March (e.g. potatoes), provision is made in some States for a special collection after the harvest is completed and in others for the inclusion of the total estimated yield expected from the complete harvest. In cases where additional data are available from marketing authorities or other sources these are used in conjunction with the 'census' returns. The statistics published in this section are therefore shown in 'agricultural' years. For most purposes there will be little error involved in considering them as applying to years ended 30 June.

For more detailed information on period covered and details of the weights and measures used in recording production of agricultural commodities *see* introductory notes to the bulletin *Rural Industries*. Details of weights and measures are also included after the Contents of this Year Book.

Progress, assistance and control

Progress of cultivation

The following table shows the area of crops in each of the States and Territories of Australia at ten-yearly intervals since 1860–61 and during each of the ten seasons 1958–59 to 1967–68. Plate 40 in this chapter shows the area of crops in Australia from 1900–01 onward (page 828).

AREA OF CROPS: STATES AND TERRITORIES, 1860-61 TO 1967-68
('000 acres)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1860–61	246	387	4	359	25	153	..	..	1,174
1870–71	385	693	52	802	55	157	..	..	2,144
1880–81	606	1,549	114	2,087	64	141	..	..	4,561
1890–91	853	2,032	225	2,093	70	157	..	..	5,430
1900–01	2,447	3,114	458	2,370	201	224	..	..	8,814
1910–11	3,386	3,952	667	2,747	855	287	..	..	11,894
1920–21	4,465	4,490	780	3,231	1,805	297	..	2	15,070
1930–31	6,811	6,716	1,144	5,426	4,792	268	2	5	25,164
1940–41	6,375	4,467	1,734	4,255	4,027	254	..	6	21,118
1950–51	4,761	4,537	2,077	3,812	4,650	290	n.a.	6	20,133
1958–59	6,820	5,040	2,852	4,436	6,135	339	1	8	25,631
1959–60	7,137	4,817	2,926	4,400	6,495	322	1	7	26,105
1960–61	8,044	5,838	3,057	5,399	6,871	357	2	8	29,576
1961–62	8,288	5,626	3,216	5,024	7,112	364	2	7	29,639
1962–63	8,903	6,318	3,490	5,495	7,482	395	2	7	32,092
1963–64	8,997	6,102	3,665	5,975	6,915	380	3	8	32,045
1964–65	10,334	6,477	3,967	5,965	7,505	404	4	9	34,665
1965–66	9,052	6,219	4,119	6,030	8,680	386	4	8	34,498
1966–67	12,421	6,765	4,605	6,488	8,817	444	4	10	39,553
1967–68	12,985	6,250	4,928	6,434	9,138	423	6	7	40,171

The Australian Agricultural Council

The influence of governmental and semi-governmental authorities on Australian rural industry is most apparent in the fields of guaranteed prices, subsidies and controlled marketing. Many of these aspects of intervention at the national level take place indirectly through the Australian Agricultural Council. This is a permanent organisation which was formed following a conference of Commonwealth and State Ministers on agricultural and marketing matters held at Canberra in December 1934. The Council consists of the Commonwealth Ministers for Primary Industry, Trade and Industry, Interior, and External Territories and the State Ministers of Agriculture, with power to co-opt the services of other Commonwealth and State Ministers as required. The principal functions of the Council are: the promotion of the welfare and development of agricultural industries generally; the exchange of information on agricultural production and marketing; the improvement of the quality of agricultural products and the maintenance of high grade standards; to ensure, as far as possible, balance between production and available markets; and organised marketing.

In addition, a permanent Standing Committee on Agriculture was formed to advise the Council, to secure co-operation and co-ordination in agricultural research, to advise State and Commonwealth Governments on the initiation and development of agricultural research, and to secure co-operation between all Governments in respect of quarantine measures against pests and diseases of plants and animals.

The Standing Committee on Agriculture comprises the permanent heads of the State Departments of Agriculture, the Secretary, Department of Primary Industry, and a representative each from the Commonwealth Departments of the Treasury, Health, Trade and Industry, Interior, External Territories, and from the Commonwealth Scientific and Industrial Research Organization.

Financial assistance to primary producers

Financial assistance to primary producers by the Commonwealth Government may be provided in a number of ways. Examples of these follow.

Bounties. A bounty to producers, not exceeding $4,000,000 in any one year, is currently paid on raw cotton produced in Australia. Commencing with the 1969 cotton crop the bounty will be phased out. In 1969 the total available will be $4,000,000; in 1970, $3,000,000 and in 1971 $2,000,000. Payments will cease after that time.

A bounty of $27,000,000 paid annually on the production of butter, cheese and related butterfat products and an export bounty on processed milk products of a maximum of $800,000 annually are both continued in the fifth Five Year Dairy Industry Stabilization Plan which commenced 1 July 1967.

Commitments to industry-financed stabilisation schemes. In schemes of this nature the Commonwealth generally accepts a defined contingent liability to contribute to Government-approved stabilisation funds if falling prices, or rising costs, or both, lead to a situation where growers' contributions prove inadequate. The Dried Vine Fruits Stabilization Fund and the Wheat Prices Stabilization Fund are examples of this.

Other financial assistance

The Commonwealth Government also pays for cattle tick control, flood, drought and bush fire relief, fisheries research, and farm mechanisation research.

Over recent years, legislative research schemes financed by matching contributions from the Commonwealth, and industry or States, or both, have been initiated in regard to tobacco, wool, wheat, dairy produce, meat, eggs, wine and honey. Non-legislative schemes, on a similar financial basis, have been operative in relation to other research projects, e.g. plague locusts, pest management in pome fruit orchards, grape crop forecasting, honey research, barley research, banana research, fruit fly research and poultry research.

Agricultural training and research

Agricultural colleges have been established in all States except Tasmania. The primary function of these colleges is the training of students in the various phases of agriculture and livestock husbandry. Students are required to undertake a considerable amount of practical work in addition to lectures and theory. A secondary function of the colleges is agricultural research and experimentation. To a lesser degree, they carry out extension work in the form of public field days. Upon graduation, students receive diplomas in agriculture, dairying, etc., according to the course undertaken. These courses have been progressively upgraded over recent years (*see also* the chapter Education, Cultural Activities and Research).

Experimental farms have been set up by State Departments of Agriculture in all States. They are concerned primarily with agricultural research and experimentation, each farm concentrating on problems specific to the region in which it is located. The results of the work undertaken are passed on to farmers at field days which are held at regular intervals, through publication in various agricultural or scientific journals, and through the agricultural extension services of the State Departments of Agriculture.

The Commonwealth Scientific and Industrial Research Organization has field stations in many parts of Australia, and sometimes undertakes research jointly with the appropriate State authorities. It also has regional laboratories in several States, conducting research into agronomic and livestock problems as they occur in each particular region (*see also* the chapter Education, Cultural Activities and Research). The State Departments of Agriculture study problems of particular significance within their own boundaries. In addition, the universities carry out valuable work in their laboratories and on their experimental farms.

Extension services

Extension services operate in each State and in the Northern Territory, Australian Capital Territory and the Territory of Papua-New Guinea. Commonwealth funds have been provided in the States to enable them to expand their extension activities, through the Commonwealth Extension

Services Grant since 1952–53 and the Commonwealth Dairy Industry Grant since 1948–49. The funds made available annually increased over the period and by 1963 had reached $1.4 million. In 1966 the Commonwealth decided to amalgamate the two grants and to increase the funds available progressively over a period of five years to a maximum of $5.4 million per annum. The amounts made available from the Commonwealth Extension Services Grant under this expanded programme have been $2.9 million in 1966–67, $3.65 million in 1967–68 and $4.4 million in 1968–69. The scope of the Grant now includes agricultural extension and regional research, information and farm management services and training for extension and regional research. State Departments of Agriculture have been the main recipients of the Grant.

Distribution, production and value of crops

Distribution of crops

The wide range of climatic and soil conditions over the agricultural regions of Australia has resulted in a diversity of crops being grown throughout the Commonwealth. Generally, cereal crops (excluding rice and sorghum) are grown in all States over wide areas, while industrial crops are confined to specific locations in a few States. A graph showing the area sown to principal crops for the years 1900–01 to 1967–68 appears on plate 40, over the page.

AREA OF CROPS: STATES AND TERRITORIES, 1967-68

(Acres)

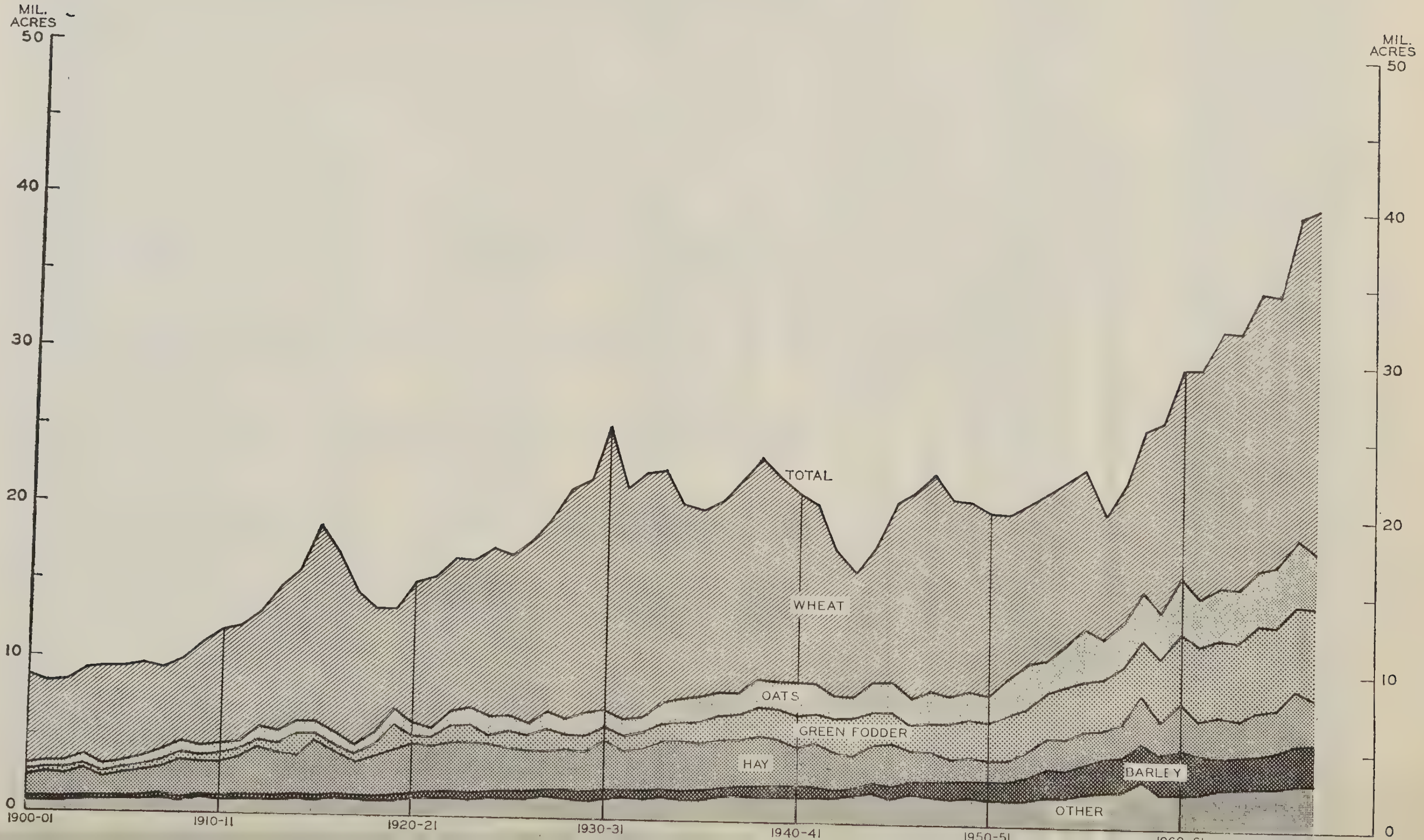
Crops	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Cereals for grain—									
Barley—									
2-row	256,758	287,013	309,470	1,096,868	100,500	23,259	..	..	2,073,868
6-row	110,722	18,000	32,998	59,761	315,285	792	..	..	537,558
Maize—Hybrid	(*a*)47,636	825	(*a*)141,514	..	(*b*)	..	..	..	(*c*)189,975
Other	(*a*)3,933	92	(*a*)6,218	..	155	..	(*d*)	..	(*c*)10,398
Oats	907,252	722,928	30,772	524,868	1,158,114	35,371	..	584	3,379,889
Panicum, millet and setaria	284	2,534	(*a*)48,594	..	..	..	..	..	51,412
Rice	75,874	..	43	..	(*d*)	..	40	..	(*c*)75,957
Rye	6,856	9,578	45	57,868	10,944	92	..	..	85,383
Sorghum	(*a*)78,165	598	(*a*)382,192	..	879	..	(*e*)	..	(*c*)461,834
Wheat	8,214,905	3,223,880	1,476,589	2,864,155	6,647,095	12,018	..	2,337	22,440,979
Hay	585,500	1,165,211	119,055	429,026	317,923	178,838	1,919	2,475	2,799,947
Green fodder	2,326,420	544,901	1,336,859	1,217,033	414,343	75,053	193	1,339	5,916,141
Other stock fodder	16,597	24,338	2,626	24,243	4,806	36,355	7	..	108,972
Grass seed—									
Lucerne	29,950	(*f*)	679	27,188	..	..	..	..	(*c*)57,817
Clover	8,465	2,843	..	2,953	80,224	203	..	..	94,688
Other	8,464	8,389	46,352	8,195	17,948	(*g*)2,182	3,406	60	94,996
Industrial crops—									
Broom millet	1,534	465	209	..	31	..	..	..	2,239
Canary seed	..	..	7,138	..	..	..	..	..	7,138
Cotton	53,474	..	(*a*)11,629	..	11,782	..	..	..	76,885
Flax for linseed	9,947	9,365	27,764	516	6,886	..	..	..	54,478
Hops	..	(*h*)761	..	..	(*d*)	(*i*)1,606	..	..	(*c*)2,367
Peanuts	353	..	61,373	..	..	..	12	..	61,738
Safflower	8,550	489	95,351	(*d*)	225	..	..	..	(*c*)104,615
Sugar cane—									
For crushing	22,181	..	530,828	..	..	..	..	..	553,009
Stand-over and cut for plants	19,249	..	102,688	..	..	..	..	..	121,937
Sunflower	638	141	8,185	..	..	..	..	..	8,964
Tobacco	1,831	8,664	12,472	..	..	..	..	..	22,967
Other	17	1,103	172	(*d*)	..	302	..	..	(*c*)1,594
Vegetables for human consumption—									
Onions	1,116	3,617	2,951	1,682	340	146	(*j*)	(*j*)	(*c*)9,852
Potatoes	24,334	40,329	17,347	6,527	6,149	10,960	(*j*)	22	(*c*)105,668
Other	42,061	49,133	45,550	9,256	8,980	22,313	189	116	177,598
Vineyards—									
Bearing	19,511	44,802	3,071	53,392	7,064	..	..	..	127,840
Not bearing	2,644	3,923	329	4,737	601	..	..	..	12,234
Fruit—									
Bearing	76,691	55,940	36,503	31,310	19,213	17,758	58	29	237,502
Not bearing	19,107	15,218	14,888	13,803	6,385	4,004	40	8	73,453
Nurseries and cut flowers	1,294	2,686	588	295	246	123	..	8	5,240
All other crops	3,040	2,541	15,427	73	1,727	1,239	136	31	24,214
Total area	**12,985,353**	**6,250,307**	**4,928,460**	**6,433,749**	**9,137,845**	**422,610**	**6,000**	**7,009**	**40,171,333**

(*a*) Sown 1966–67. (*b*) Included in Other maize. (*c*) Incomplete: *see* individual States. (*d*) Not available for publication. Included in All other crops. (*e*) Not available for publication. Excluded from totals. (*f*) Not available separately. Included in All other crops. (*g*) Excludes area sown simultaneously to oats. (*h*) Includes 36 acres not bearing. (*i*) Includes 104 acres not bearing. (*j*) Not available for publication. Included in Other vegetables.

PLATE 40

AREA OF CROPS: AUSTRALIA

1900-01 TO 1967-68



RELATIVE AREAS OF CROPS: STATES AND TERRITORIES, 1967-68

(Per cent)

Crop	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Wheat (grain)	63.3	51.6	30.0	44.5	72.7	2.8	..	33.3	55.9
Green fodder	17.9	8.7	27.1	18.9	4.5	17.8	3.2	19.1	14.7
Oats (grain)	7.0	11.6	0.6	8.1	12.7	8.4	..	8.3	8.4
Hay	4.5	18.6	2.4	6.7	3.5	42.3	32.0	35.3	7.0
Barley (grain)	2.8	4.9	7.0	18.0	4.6	5.7	..	..	6.5
Sugar cane for crushing	0.2	..	10.8	..	..	..	..	..	1.4
Sorghum	0.6	..	7.8	..	..	..	(*a*)	..	1.2
Fruit	0.7	1.1	1.0	0.7	0.3	5.1	1.6	0.5	0.8
Maize (grain)	0.4	..	2.9	..	..	..	..	..	0.5
Vineyards	0.2	0.8	0.1	0.9	0.1	..	..	..	0.3
Potatoes	0.2	0.7	0.4	0.1	0.1	2.6	..	0.3	0.3
All other	2.2	2.0	9.9	2.1	1.5	15.3	63.2	3.2	3.0
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(*a*) Not available for publication; area excluded from totals.

AREA OF CROPS: AUSTRALIA, 1963-64 TO 1967-68

('000 acres)

Crop	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Cereals for grain—					
Barley—					
2-row	1,621	1,655	1,766	1,951	2,074
6-row	392	409	531	546	538
Maize—					
Hybrid	172	176	164	187	190
Other	43	36	32	14	10
Oats	3,392	3,497	3,768	4,258	3,380
Rice	59	62	64	74	76
Sorghum	366	346	433	502	462
Wheat	16,474	17,919	17,515	20,823	22,441
Hay	2,602	2,793	2,780	3,496	2,800
Green fodder	4,877	5,614	5,324	5,399	5,916
Grass seed	219	258	227	304	248
Industrial crops—					
Cotton	41	38	55	53	77
Flax for linseed	118	134	25	35	54
Hops	2	2	2	2	2
Peanuts	45	46	58	70	62
Safflower	19	48	60	95	105
Sugar cane	539	628	647	669	675
Tobacco	29	26	23	22	23
Vegetables for human consumption—					
Onions	9	10	8	10	10
Potatoes	102	88	96	99	106
Other	166	168	185	184	178
Vineyards	136	139	140	139	140
Fruit	310	311	313	313	311
All other crops	312	262	282	308	294
Total	**32,045**	**34,665**	**34,498**	**39,553**	**40,171**

Production and yield per acre of crops

PRODUCTION OF CROPS: STATES AND TERRITORIES, 1967-68

Crop		N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Cereals for grain—										
Barley—										
2-row	'000 bus	3,474	2,550	8,208	11,887	1,753	859	..	..	28,731
6-row	,,	1,360	158	757	492	5,274	25	..	..	8,067
Maize—										
Hybrid	,,	(*a*)2,183	29	(*a*)4,617	..	(*b*)	..	..	..	(*c*)6,829
Other	,,	(*a*)138	3	(*a*)161	..	2	..	(*d*)	..	(*c*)303
Oats	,,	8,235	6,859	450	3,299	19,759	1,014	..	12	39,628
Panicum, millet and setaria	,,	3	47	(*a*)730	..	..	..	..	..	780
Rice	,,	11,592	..	4	..	(*d*)	..	2	..	11,597
Rye	,,	48	42	..	197	91	2	..	..	380
Sorghum	,,	(*a*)1,580	18	(*a*)8,939	..	45	..	(*d*)	..	(*c*)10,582
Wheat	,,	87,323	28,317	27,417	26,899	106,975	316	..	42	277,289
Hay	'000 tons	806	1,556	296	418	421	309	3	3	3,812
Grass seed—										
Lucerne	cwt	20,592	n.a.	514	23,288	..	..	..	..	(*c*)44,394
Clover	,,	13,587	5,898	..	3,174	154,710	403	..	..	177,772
Other	,,	21,005	6,356	23,148	9,050	27,722	4,970	2,866	21	95,138
Industrial crops—										
Broom millet—										
Fibre	cwt	8,652	544	789	..	260	..	..	..	10,245
Grain	bushels	9,717	421	n.a.	..	..	..	..	..	(*c*)10,138
Canary seed	bus	..	..	60,274	..	..	..	..	..	60,274
Cotton, unginned	'000 lb	170,064	..	(*a*)18,718	..	25,954	..	..	..	214,736
Flax for linseed	tons	952	804	6,571	72	2,083	..	..	..	10,482
Hops (dry weight)	cwt	..	9,922	..	..	(*d*)	26,830	..	..	(*c*)36,752
Peanuts	,,	3,920	..	602,207	..	..	..	32	..	606,159
Safflower	'000 bus	59	1	815	(*d*)	2	..	..	..	(*c*)878
Sugar cane for crushing	'000 tons	1,039	..	15,718	..	..	..	..	..	16,756
Sunflower	cwt	3,140	255	33,669	..	..	..	..	..	37,064
Tobacco, dried leaf	'000 lb	2,075	7,625	15,021	..	..	..	..	..	24,721
Vegetables for human consumption—										
Onions	tons	9,535	11,339	14,882	16,635	4,633	1,462	(*d*)	(*d*)	(*c*)58,486
Potatoes	,,	122,795	215,941	106,429	63,331	70,469	79,058	(*d*)	89	(*c*)658,112
Vineyards—										
Grapes—										
For drying	,,	52,196	259,161	..	29,616	6,832	..	..	..	347,805
,, table	,,	7,783	13,236	5,009	1,031	2,177	..	..	..	29,236
,, wine	,,	49,536	26,359	196	170,581	4,810	..	..	..	251,482

(*a*) Harvested from crop sown in 1966–67. (*b*) Included in Other maize. (*c*) Incomplete; *see* individual States. (*d*) Not available for publication.

PRODUCTION OF PRINCIPAL CROPS: AUSTRALIA, 1963-64 TO 1967-68

Crop		*1963-64*	*1964-65*	*1965-66*	*1966-67*	*1967-68*
Cereals for grain—						
Barley—						
2-row	'000 bus	36,464	41,775	33,235	49,207	28,731
6-row	,,	6,931	7,540	8,600	12,381	8,067
Maize—						
Hybrid	,,	5,592	5,896	4,253	7,026	6,829
Other	,,	1,130	983	664	465	303
Oats	,,	68,234	70,043	60,739	107,106	39,628
Rice	,,	7,455	8,030	9,540	11,250	11,597
Sorghum	,,	7,889	7,164	7,149	11,711	10,582
Wheat	,,	327,912	368,789	259,666	466,610	277,289
Hay	'000 tons	4,269	4,963	4,179	6,371	3,812
Grass seed	cwt	333,286	411,919	356,815	488,477	317,303
Industrial crops—						
Cotton, unginned	'000 lb	18,223	63,009	133,850	120,360	214,736
Flax for linseed	tons	29,516	46,600	6,064	13,744	10,482
Hops (dry weight)	cwt	19,858	27,892	36,463	28,907	36,752
Peanuts	,,	460,726	207,115	548,279	827,151	606,159
Safflower	'000 bus	303	697	550	1,369	878
Sugar cane for crushing	'000 tons	12,118	15,070	14,155	16,685	16,756
Tobacco (dried leaf)	'000 lb	34,342	25,111	27,361	27,905	24,721
Vegetables for human consumption—						
Onions	'000 tons	59	70	58	84	58
Potatoes	,,	562	508	639	643	658
Vineyards—						
Grapes	,,	646	680	582	684	629
Wine made(*a*)	'000 gals	37,536	38,718	34,125	41,514	44,307
Dried vine fruits	'000 tons	104	108	91	107	85

(*a*) Net factory and farm production of beverage and distillation wine. This excludes the liquid gallonage of spirits added in wine fortifying.

YIELD PER ACRE OF PRINCIPAL CROPS: AUSTRALIA, 1963-64 TO 1967-68

Crop		*1963-64*	*1964-65*	*1965-66*	*1966-67*	*1967-68*
Cereals for grain—						
Barley—						
2-row	bushels	22.5	25.2	18.8	25.2	13.9
6-row	,,	17.7	18.4	16.2	22.7	15.0
Maize—						
Hybrid	,,	32.6	33.4	25.9	37.6	35.9
Other	,,	26.2	27.4	20.5	32.4	29.1
Oats	,,	20.1	20.0	16.1	25.2	11.7
Rice	,,	125.5	130.3	148.1	152.6	152.7
Sorghum	,,	21.6	20.7	16.5	23.3	22.9
Wheat	,,	19.9	20.6	14.8	22.4	12.4
Hay	tons	1.64	1.78	1.50	1.82	1.36
Industrial crops—						
Cotton, unginned	lb	445	1,662	2,436	2,264	2,793
Flax for linseed	tons	0.25	0.35	0.25	0.40	0.19
Hops (dry weight)(*a*)	cwt	9.68	13.23	17.24	13.51	16.50
Peanuts	,,	10.25	4.51	9.50	11.86	9.82
Safflower	bushels	15.64	14.68	9.12	14.47	8.40
Sugar cane for crushing(*a*)	tons	29.02	32.04	28.13	29.93	30.30
Tobacco (dried leaf)	lb	1,183	954	1,165	1,247	1,076
Vegetables for human consumption—						
Onions	tons	6.43	7.18	7.04	8.27	5.94
Potatoes	,,	5.51	5.78	6.63	6.47	6.23
Vineyards—						
Grapes(*a*)	,,	5.21	5.42	4.58	5.37	4.92

(*a*) Per acre of productive crops.

As a large proportion of the Australian wheat crop is normally exported, the marketing of wheat plays an important part in the industry. The Australian Wheat Board was constituted in September 1939, under National Security (Wheat Acquisition) Regulations, to purchase, sell, or dispose of wheat or wheat products, and to manage and control all matters connected with the handling, storage, protection, shipment, etc. of wheat acquired, and such other matters as were necessary to give effect to the regulations. Details of the operations of the Australian Wheat Board and the Wheat Stabilization Board in licensing wheat grown during the seasons 1941–42 to 1948–49 will be found in Year Book No. 38, pages 940–1, and a detailed survey of legislation relating to stabilisation of the wheat industry, including controls exercised during the 1914–18 and 1939–45 Wars and legislation establishing the Wheat Stabilization Plan in 1948, is given in the Appendix to Year Book No. 37, pages 1295–9.

The Wheat Stabilization Board ceased to function on 31 December 1948, and under the *Wheat Industry Stabilization Act* 1948 the Australian Wheat Board was reconstituted to administer the first stabilisation plan and was given powers similar to those held under the National Security Regulations. The new Board commenced to function on 18 December 1948. The Board has been continued in existence by the *Wheat Industry Stabilization Acts* 1954, 1958, 1963–66 and 1968 for the purpose of administering the second, third, fourth and fifth five-year stabilisation plans. Details of the more recent plans were published in Year Book No. 40, pages 841 and 842 (1947–48 to 1952–53 Plan), No. 44, page 861 (1953–54 to 1957–58), No. 48, pages 903 and 904 (1958–59 to 1962–63) and No. 54, pages 868 and 869 (1963–64 to 1967–68).

Fifth Post-war Wheat Industry Stabilisation Plan. Following negotiations during 1968, the fifth post-war Wheat Industry Stabilisation Plan was enacted by the Commonwealth and States towards the end of 1968. The new plan operates on very much the same lines as the previous ones. However, there are some important changes in detail in the main features of the plan which are set out below.

The plan operates for five years. It commenced with the 1968–69 wheat crop and will end with the marketing of the 1972–73 crop.

The *Wheat Export Charge Act* 1968 repealed the *Wheat Export Charge Act* 1953 and provided for an export charge on wheat and wheat products for the seasons 1968–69 to 1972–73 inclusive. The charge which may be levied is the excess of the average export return over the sum of the guaranteed price (*see below*) and five cents per bushel with a maximum charge of fifteen cents per bushel. The ceiling on the Wheat Prices Stabilisation Fund, into which this charge is paid, has been raised from $60 million to $80 million. Any excess beyond this figure is returned to growers on a 'first in, first out' basis.

Payments from the Wheat Prices Stabilisation Fund will be paid to the Australian Wheat Board when required, for the purpose of building up the average export price for any season to the guaranteed price. When the average export realisations fall below the guaranteed price the deficiency is made up first by drawing upon the Stabilisation Fund in respect of up to 200 million bushels of wheat from each crop. If the Fund is exhausted, the necessary deficiency payments will be made from the Commonwealth Government's Consolidated Revenue Fund. As the return from exports has been below the guaranteed price, there have been no collections of the wheat export charge since the 1956–57 No. 20 Pool when $3,178,000 was collected. In fact, growers' money in the Fund was exhausted with the closure of the 1959–60 Pool, and since then the Commonwealth has been obliged to meet its commitment in respect of the export guarantee. Up to the closure of the 1966–67 Pool, this has involved an amount totalling $112 million.

The Commonwealth has guaranteed a price to growers applying to 200 million bushels of wheat exported from each crop during the period of the plan. The guaranteed price is subject to adjustment in each year of the plan in accordance with changes in its cash cost elements. There will no longer be any adjustment for imputed costs such as interest on farmers' equity. The guaranteed price per bushel in the 1968–69 season is $1.45 f.o.b. vessel, equivalent to approximately $1.415 f.o.r. ports.

The Australian Wheat Board is retained as the sole constituted authority for the marketing of wheat within Australia and for the marketing of wheat and flour for export from Australia for the period of the plan.

The home consumption price for 1968–69, the first year of the new plan, was established at $1.71 per bushel, bulk basis, f.o.r. ports. (This price includes a loading of one cent per bushel to cover the cost of transporting wheat from the mainland to Tasmania.) There is provision in the plan for annual adjustments to be made in the following years by the same amount as the guaranteed price is adjusted. The home consumption price was $1.565 per bushel for the 1966–67 season and $1.655 for the 1967–68 season. These prices included a loading of 1.5 cents per bushel to meet freight charges on wheat shipped to Tasmania.

A premium is paid from export realisations on wheat grown in Western Australia and exported from that State, in recognition of the natural freight advantage enjoyed by Western Australia owing to its proximity to the principal overseas markets for wheat. The premium is the amount of the actual freight advantage enjoyed by Western Australia up to a maximum of 2.5 cents a bushel.

Wheat standards

A description of the F.A.Q. (fair average quality) standard of wheat which was formerly in use is given in issues of the Year Book up to No. 53 (*see*, for example No. 53 page 902). Australian wheat is now marketed under eleven different and distinct classifications. Each reflects the climatic and growing characteristics of its region of origin and also the particular characteristics of the varieties of wheat cultivated.

For each classification, samples of wheat are obtained each year and are mixed to give a representative sample of that grade. From these samples, which are representative of all the wheat of a particular classification grown in that region, standards for each grade are established; the bushel weight is determined by the use of the Schopper 1-litre scale chondrometer. This standard is used as the basis for sales of each grade and varies from year to year and from State to State. The eleven different grades of wheat are:

Queensland prime hard
New South Wales prime hard
South Australian hard
Queensland F.A.Q.
New South Wales northern F.A.Q.
New South Wales southern–western F.A.Q.
Victorian F.A.Q.
South Australian F.A.Q.
Western Australian F.A.Q.
Western Australian soft
Victorian soft

The six F.A.Q. grades, while possessing some characteristics in common, vary in protein content, milling characteristics, and dough qualities, and all are distinct grades. Similarly, the prime hard, hard, and soft grades are individual grades segregated for specific end uses.

Australia currently produces a full range of wheats for all purposes from high protein hard wheats to low protein soft wheats.

Bulk handling and storage of wheat

A detailed description of the bulk handling system, including its advantages and disadvantages compared with other methods of handling, appears on pages 954–8 of Year Book No. 39.

New South Wales, Victoria and Western Australia have operated bulk handling systems for a number of years, and in more recent years other States have also introduced bulk systems. The bodies concerned with the administration of bulk handling in the various States are: Grain Elevators Board of New South Wales, Victorian Grain Elevators Board, State Wheat Board (Queensland), South Australian Co-operative Bulk Handling Ltd., Co-operative Bulk Handling Ltd. (Western Australia), and the Tasmanian Grain Elevators Board.

WHEAT: TOTAL CAPACITY OF BULK HANDLING FACILITIES(*a*)
STATES, 30 NOVEMBER 1964 TO 1968

(*Source:* Bulk handling authorities in the various States. *See* above)

('000 bushels)

State	*1964*	*1965*	*1966*	*1967*	*1968*
New South Wales	(*b*)105,152	(*b*)101,992	(*b*)141,182	(*b*)132,792	184,972
Victoria(*c*)	95,974	102,609	105,038	105,514	108,090
Queensland	13,178	15,956	19,213	24,987	30,600
South Australia	35,483	39,685	43,328	58,362	73,050
Western Australia	115,438	128,175	134,898	144,487	159,677
Tasmania	960	1,060	1,060	1,060	1,060
Australia	**366,185**	**389,477**	**444,719**	**467,202**	**557,449**

(*a*) Includes terminals, sub-terminals, country installations, and temporary storage. (*b*) Storage at beginning of season. (*c*) Includes storage in southern New South Wales operated by the Victorian Grain Elevators Board.

Particulars of the operation of the bulk handling and storage systems in each State are set out on pages 916 and 917 of Year Book No. 48.

Value of agricultural production

Further reference to the value of production of agriculture and other industries in Australia as well as a brief explanation of the terms used may be found in the chapter Miscellaneous.

GROSS VALUE(*a*) OF AGRICULTURAL PRODUCTION: AUSTRALIA, 1963-64 TO 1967-68

($'000)

Crop	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Cereals for grain—					
Barley	47,484	55,620	47,932	73,743	42,222
Maize	10,364	9,999	9,517	10,395	9,463
Oats	49,666	51,449	53,323	83,384	34,205
Rice	7,912	8,529	10,224	12,445	12,831
Wheat	467,432	517,702	384,853	689,880	435,443
Hay	87,462	99,209	107,755	151,470	107,434
Green fodder	20,990	25,011	28,380	24,805	29,397
Industrial crops—					
Cotton, unginned	2,212	7,685	14,323	12,468	19,675
Hops	1,534	2,372	3,020	2,531	3,211
Sugar cane	162,880	133,372	119,350	138,431	138,409
Tobacco (dried leaf)	33,408	24,608	30,399	29,782	27,919
Vegetables for human consumption—					
Onions	4,096	5,340	6,667	6,044	7,167
Potatoes	33,226	60,713	43,751	41,233	51,985
Other vegetables for human consumption	66,514	68,335	74,804	82,387	85,417
Grapes	46,416	50,385	43,516	50,173	48,478
Fruit and nuts	135,133	146,242	151,877	162,918	155,352
All other crops	51,758	53,413	51,603	67,183	60,661
Total	**1,228,487**	**1,319,984**	**1,181,294**	**1,639,273**	**1,269,269**

(*a*) Includes amounts paid as bounty, relief, etc.

Values of agricultural production in the various States and Territories are shown for 1967–68 in the following table. In computing the net value of production, no deduction has been made for the cost of maintenance of farm buildings and fences, nor for the depreciation of farm plant.

GROSS, LOCAL AND NET VALUES OF AGRICULTURAL PRODUCTION STATES AND TERRITORIES, 1967-68

($'000)

State or Territory	*Gross production valued at principal markets*	*Marketing costs*	*Local value of production*	*Value of materials used in process of production*	*Net value of production (a)*
New South Wales	328,377	61,203	267,174	(*b*)39,795	227,380
Victoria	221,960	25,968	195,992	26,491	169,501
Queensland	308,922	37,489	271,433	52,002	219,431
South Australia	127,288	12,348	114,940	24,036	90,903
Western Australia	234,484	34,708	199,776	37,275	162,501
Tasmania	47,309	11,715	35,595	6,325	29,270
Northern Territory	653	n.a.	653	n.a.	653
Australian Capital Territory	276	26	250	12	238
Australia	**1,269,269**	**183,457**	**1,085,813**	**185,936**	**899,877**

(*a*) No deduction has been made for depreciation and maintenance. (*b*) No allowance has been made for costs of power, power kerosene, petrol and other oils.

NET VALUE OF AGRICULTURAL PRODUCTION(*a*): STATES AND TERRITORIES, 1963–64 TO 1967–68

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Net value ($'000)—									
1963–64	245,906	218,136	222,370	125,180	79,622	25,729	169	276	917,388
1964–65	293,883	232,775	193,673	134,239	92,800	27,223	222	349	975,164
1965–66	172,875	202,674	198,665	105,657	154,494	23,070	225	253	857,913
1966–67	403,530	255,016	229,426	137,042	153,717	29,381	354	537	1,209,003
1967–68	227,380	169,501	219,431	90,903	162,501	29,270	653	238	899,877
Per head of population ($)—									
1963–64	60.29	70.98	139.42	122.31	99.67	70.93	3.38	3.59	82.95
1964–65	70.94	74.22	119.04	127.59	113.56	74.31	4.21	4.14	86.46
1965–66	41.07	63.45	119.67	97.66	184.52	62.42	4.06	2.73	74.59
1966–67	94.44	78.47	135.91	124.14	178.30	78.58	6.09	5.37	103.26
1967–68	52.30	51.33	127.74	81.29	182.07	77.16	10.73	2.20	75.45

(*a*) No deduction has been made for depreciation and maintenance.

Indexes of quantum and price of agricultural production

Indexes of quantum and price of agricultural production are shown in the following table. The quantum indexes relate to gross output of farm products valued at constant prices. The quantities of each farm product produced each year have been revalued at the unit gross value for the period 1936–37 to 1938–39. The price indexes relate to average 'prices' of farm products realised at the principal markets of Australia. Average quantities of each product marketed in the period 1946–47 to 1950–51 have been used as fixed weights. Further details on weights used, etc. are to be found in the chapter Miscellaneous.

INDEXES OF QUANTUM(*a*) AND PRICE OF AGRICULTURAL PRODUCTION, 1963-64 TO 1967-68

(*Base: Average three years ended June,* 1939 = 100)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Quantum produced—					
Wheat	199	224	158	283	168
Other crops	194	214	200	254	202
Total, all crops	*196*	*218*	*184*	*265*	*189*
Per head of population	122	133	110	156	109
Price—					
Wheat	356	351	372	366	397
Other crops	348	351	340	337	351
Total, all crops	*351*	*351*	*354*	*350*	*371*

(*a*) Indexes of value at constant prices, i.e. quantities revalued at average unit values of the base years (1936–37 to 1938–39).

Wheat

Wheat is grown on a large scale in all States except Tasmania, and is the most important crop in Australia in terms of area, production and exports. The present limits of the wheat belt have been established after considerable fluctuation over the last four decades. In January 1934 a Royal Commission was appointed to inquire into and report upon the economic condition of the growing, handling and marketing of wheat, and the manufacturing, distributing and selling of flour and bread. The Report of this Royal Commission provides an authoritative description of all aspects of the industry up to that time.

Wheat marketing and research

Two of the aspects of governmental and semi-governmental assistance and control which have contributed to the development of the industry are the organisation of overseas marketing and of research.

International Wheat Agreement

Details of the first and second International Wheat Agreements operative from 1 August 1949 to 31 July 1953, and from 1 August 1953 to 31 July 1956, respectively, were published in Year Book No. 42 (*see* pages 840–1) or previous issues. Details of the third and fourth International Wheat Agreements which covered the period from 1 August 1956 to 31 July 1959 and 1 August 1959 to 31 July 1962 were published in Year Books 43 (page 836) and 48 (page 906), respectively.

A fifth International Wheat Agreement, ratified by the required number of wheat exporting and importing countries, came into force on 1 August 1962. This was intended to cover the three-year period from 1 August 1962 to 31 July 1965, but at a special meeting held in February 1965 the International Wheat Council adopted the text of a protocol providing for the prolongation of the Agreement, without amendment, to 31 July 1966. The Council stated that it recognised the need for the maintenance of institutional arrangements to provide for continuing international co-operation in wheat matters, and that, following its decision to recommend a one-year extension of the existing agreement, it had given immediate consideration to preparatory work designed to ensure effective arrangements to follow the expiry of the term of the protocol. The Agreement was subsequently extended by protocol to 31 July 1967 and, with respect to its administrative provisions only, for a further year to 31 July 1968.

International Grains Arrangement

In August 1967 agreement was reached on a new International Grains Arrangement to operate for a period of three years from 1 July 1968. The new arrangement consists of two legal instruments, the Wheat Trade Convention and the Food Aid Convention.

The Wheat Trade Convention seeks to continue the orderly marketing arrangements which have been developed over a series of International Wheat Agreements, whilst introducing a number of important new elements and improvements. It preserves the institutional and administrative structures of previous wheat agreements and will be administered by the International Wheat Council and its Secretariat.

The convention goes further than earlier wheat agreements in regard to pricing provisions. In contrast with previous agreements, which specified minimum and maximum prices for only one type of wheat, the convention specifies minimum and maximum prices for fourteen types. The basic wheat is now United States Hard Red Winter No. 2 Ordinary Protein, the minimum price for which has been fixed at $US1.73 per bushel f.o.b. from loading ports in the Gulf of Mexico. The minimum price per bushel for No. 1 Manitoba Northern Wheat is now $US1.955 f.o.b. Gulf ports, and for Australian f.a.q. wheat $US1.68 f.o.b. Gulf ports. It is estimated that, after allowing for quality differentials and for the change in geographical basing points, the general level of minimum prices is approximately 19 US cents per bushel above the minimum prices in the 1962 International Wheat Agreement. The maximum price for each type of wheat is 40 US cents above the minimum.

The convention provides for the establishment of a Prices Review Committee, on which Australia is represented. The committee will conduct a continuous review of world wheat prices and is empowered to initiate action to restore market stability when prices approach the agreed limits.

The convention continues the arrangement in the 1962 agreement whereby the member importing countries undertake to buy each year from the member exporting countries a specified percentage of their total commercial purchases of wheat. Exporting countries undertake that wheat will be made available at prices consistent with the price range and will not be sold below minimum prices to any purchaser whether a member of the arrangement or not. Member countries importing wheat from non-member countries undertake to do so at prices consistent with the price range. When prices are at the maximum of the range, exporters agree to supply to member importing countries, at prices not above the maximum, certain minimum quantities of wheat based on the importing country's historical purchases. A provision is also included under which member countries undertake to conduct any concessional transactions in grains in such a way as to avoid harmful interference with normal patterns of commercial trade.

The Food Aid Convention provides for a programme of food aid to developing countries amounting in total to 4.5 million metric tons of grains for human consumption in each of the three years of the arrangement. Australia's contribution has been fixed at 225,000 metric tons annually (8,267,000 bushels) which is approximately 5 per cent of the total contribution. Donor countries are free to specify the country or countries to which the grain may be supplied.

Research into the wheat industry

The extension and growth of the wheat industry in the past has been made possible to a large extent through research into new varieties of seed, crop rotation and fertiliser treatments by governmental, university and private research organisations. In recent years there has been a growing awareness of the value of this research, and funds are being raised by a direct levy on the growers' returns.

The *Wheat Tax Act* 1957 imposed a tax of 0.21 cents for each bushel of wheat:

(*a*) which was delivered to the Wheat Board on or after the first day of October 1956 and before the date of commencement of the Act, or

(*b*) which was delivered to the Wheat Board on or after that date.

The Act was amended in October 1965 to become the *Wheat Tax Act* 1957–1965 to provide for an increase in the rate of taxation from 0.21 cents to 0.25 cents for each bushel of wheat delivered to the Board on or after 1 October 1965. The *Wheat Research Act* 1957 provided for the establishment of a Wheat Research Trust Account to receive moneys payable under the *Wheat Tax Act* 1957 and for the setting up of a Wheat Industry Research Council to direct the expenditure of moneys from that account for research, etc. to benefit the wheat industry. This money, contributed by the growers, is being spent by the Wheat Industry Research Committees set up in the wheat-growing States. These Committees, which consist of representatives of wheatgrowers, universities and State Departments of Agriculture, also received a total of $568,000 under the provisions of the *Wheat Acquisition (Undistributed Moneys) Act* 1958.

The Commonwealth Government has undertaken to supply additional funds for research (with a maximum of $1 for $1 against the growers' contribution) and has set up the Wheat Industry Research Council to make recommendations on the appropriate expenditure of the Commonwealth contribution. The Council, at its inaugural meeting in February 1958, considered that possible avenues of research would include the breeding of better varieties, cereal chemistry, soil fertility, mechanisation, the industry's cost structure, and marketing problems. To the end of June 1968 the Council and the State Committees had spent $11,394,000, including grants to the Commonwealth Scientific and Industrial Research Organization, State Departments of Agriculture, universities, and agricultural colleges.

Wheat farms: number and classification by activity

Particulars of the number of farms growing twenty acres and upwards of wheat for grain during each of the years 1963–64 to 1967–68 are shown in the following table. A farm worked on the share system or as a partnership is included as one holding only.

NUMBER OF FARMS GROWING TWENTY ACRES AND UPWARDS OF WHEAT FOR GRAIN: STATES AND A.C.T., 1963-64 TO 1967-68

State or Territory	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
New South Wales	17,753	18,537	16,150	19,575	20,619
Victoria.	11,370	11,981	11,355	11,202	11,056
Queensland	4,927	5,236	4,941	5,674	5,867
South Australia	9,902	9,657	9,387	9,419	8,905
Western Australia	8,983	8,779	9,044	8,897	8,746
Tasmania	251	255	213	194	159
Australian Capital Territory . .	29	20	13	25	20
Australia	**53,215**	**54,465**	**51,103**	**54,986**	**55,372**

There is in Australia a widespread combination of wheat growing with other rural activities. This is illustrated, for all States and for Australia,in respect of the 1965–66 season, in a series of statistical bulletins: *Classification of Rural Holdings by Size and Type of Activity*, 1965–66, Nos 1 to 7. These publications also contain details of numbers of rural holdings classified according to area of wheat for grain.

Varieties of wheat sown

The breeding of wheat suitable to local conditions has long been established in Australia. Farrer (1845–1905) did invaluable work in pioneering this field, and the results of his labour and the continued efforts of those who have followed him have proved of immense benefit to the industry. Their efforts have resulted in the development of disease-resistant varieties, better average yields, and a greater uniformity of sample, with which have accrued certain marketing advantages, as well as an improvement in the quality of wheat grown. More than 1,000 different varieties of Australian wheats have been catalogued by the Commonwealth Scientific and Industrial Research Organization, but the number of principal varieties grown in any one season is restricted to about forty-five.

The principal varieties of wheat sown and the percentage of each to the total area sown in the five main wheat-producing States of Australia in 1967–68 were as follows: New South Wales, Heron (25.6), Falcon (12.8), Olympic (10.1); Victoria, Insignia (46.8), Olympic (24.7), Pinnacle (14.2); Queensland, Mendos (36.7), Gamut (25.9), Spica (15.1); South Australia, Insignia (31.3), Heron (29.8); and Western Australia, Gamenya (41.3), Insignia (13.8), Falcon (11.4). A detailed table of wheat varieties sown appears in the annual bulletin *The Wheat Industry* (*see* No. 114, published in March 1969).

Wheat area, production and yield per acre

Prominent factors in the early development of the wheat industry were the increase in population following the discovery of gold and the redistribution of labour after the surface gold had been won. The economic depression of 1893 interrupted its progress, but its subsequent recovery was assisted by the invention of mechanical appliances, the use of superphosphates as an aid to production, and the introduction of new and more suitable varieties of wheat for Australian conditions. The establishment of closer settlement schemes and the settling of returned soldiers and others on the land were additional factors in its expansion.

WHEAT FOR GRAIN: AREA, PRODUCTION AND YIELD PER ACRE STATES AND AUSTRALIAN CAPITAL TERRITORY, 1936-37 TO 1967-68

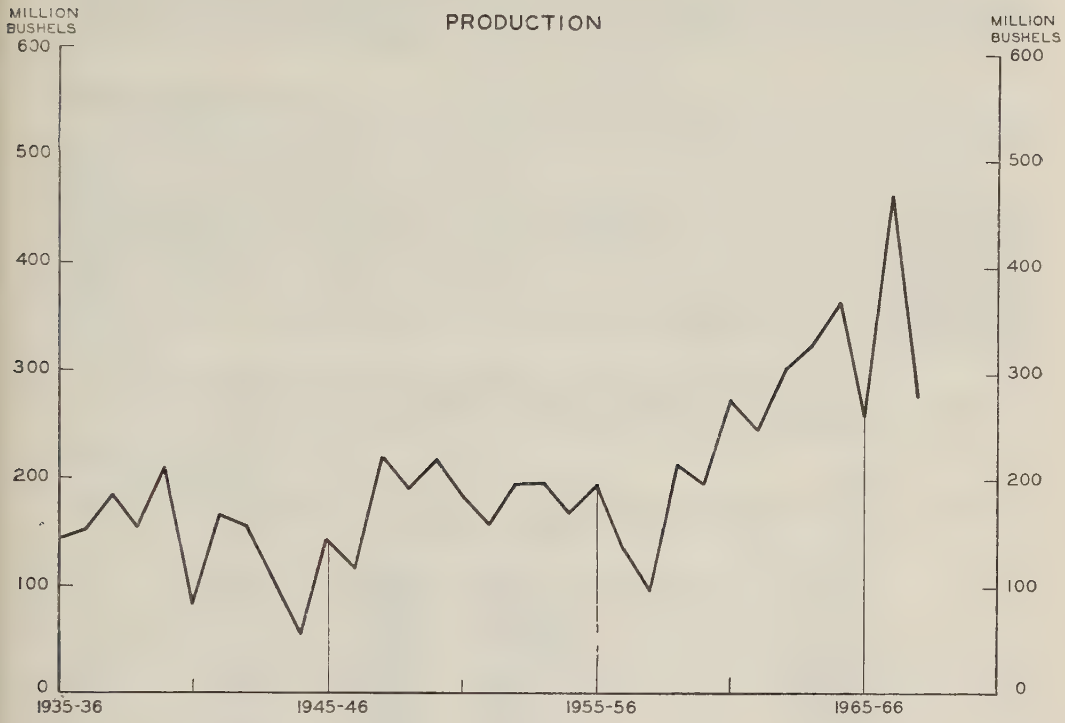
Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*A.C.T.*	*Aust.*
AREA ('000 ACRES)								
Average for three years ended—								
1938–39	4,366	2,609	366	3,100	3,005	18	2	13.466
1948–49	4,519	3,241	439	2,319	2,685	7	4	13,214
1958–59	2,392	1,737	508	1,392	3,005	5	1	9,040
Year—								
1963–64	4,964	3,109	938	2,802	4,640	18	3	16,474
1964–65	5,760	3,236	1,026	2,727	5,151	17	2	17,919
1965–66	4,577	3,074	954	2,745	6,150	14	1	17,515
1966–67	7,135	3,138	1,227	2,960	6,347	13	3	20,823
1967–68	8,215	3,224	1,477	2,864	6,647	12	2	22,441
PRODUCTION ('000 BUSHELS)(*a*)								
Average for three years ended—								
1938–39	56,890	36,374	4,783	34,606	31,539	434	45	164,671
1948–49	58,537	48,332	8,569	28,856	31,517	138	78	176,027
1958–59	35,178	36,705	9,938	26,126	40,950	135	15	149,047
Year—								
1963–64	122,472	76,302	22,275	53,971	52,340	483	69	327,912
1964–65	151,483	78,166	22,830	52,817	63,071	364	58	368,789
1965–66	39,117	60,591	17,429	39,976	102,156	368	28	259,666
1966–67	202,501	70.896	35,730	53,816	103,195	385	87	466,610
1967–68	87,323	28,317	27,417	26,899	106,975	316	42	277,289
YIELD PER ACRE (BUSHELS)(*a*)								
Average for three years ended—								
1938–39	13.0	13.9	13.1	11.2	10.5	24.1	22.5	12.2
1948–49	13.0	14.9	19.5	12.4	11.7	19.7	19.5	13.3
1958–59	14.7	21.1	19.6	18.8	13.6	24.7	15.0	16.5
Year—								
1963–64	24.7	24.5	23.8	19.3	11.3	27.5	24.6	19.9
1964–65	26.3	24.2	22.3	19.4	12.2	21.7	27.6	20.6
1965–66	8.5	19.7	18.3	14.6	16.6	26.1	20.8	14.8
1966–67	28.4	22.6	29.1	18.2	16.3	30.2	32.5	22.4
1967–68	10.6	8.8	18.6	9.4	16.1	26.3	17.8	12.4

(*a*) 60 lb per bushel.

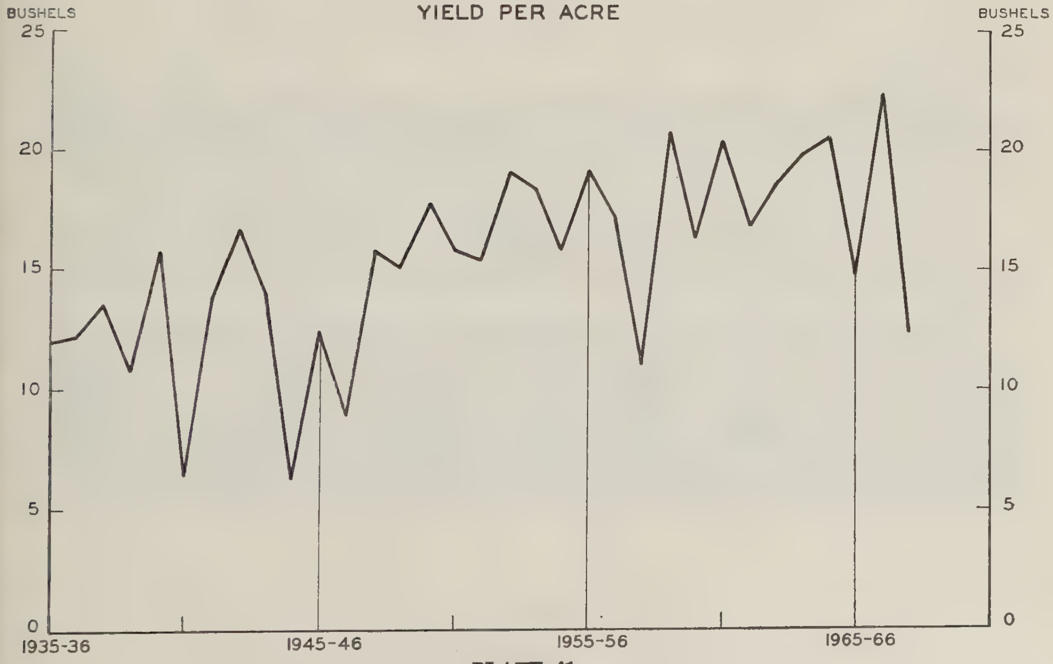
A graph showing the area sown to wheat for grain in Australia since 1900–1 appears on plate 40 of this Year Book, and a map showing the distribution of areas growing wheat for grain throughout Australia in 1962–63 appears on page 1013 of Year Book No. 50. Similar maps showing the distribution of wheat areas in 1924–25, 1938–39, 1947–48, and 1954–55 appeared respectively in Year Books No. 22, page 695, No. 34, page 451, No. 39, pages 977–8, and No. 43, page 833.

WHEAT FOR GRAIN: AUSTRALIA

1935-36 to 1967-68



PRODUCTION



YIELD PER ACRE

PLATE 41

Apart from the variations in the area sown, the size of the wheat harvest in Australia is determined largely by the nature of the season, resulting in considerable year-to-year fluctuations in production. The main wheat-producing States of Australia are New South Wales, Western Australia and Victoria. Tasmania imports wheat from the mainland to satisfy its needs, though it exports flour made from local wheat which is particularly suitable for biscuits.

The 1967–68 wheat crop was seriously affected by severe drought conditions in New South Wales, Victoria, South Australia and to some extent in Queensland. Overall, production in the 1967–68 season was 41 per cent below the record crop of 1966–67.

The following table shows the average area, production and yield per acre for decennial periods since 1861 together with similar details for the latest season, 1967–68. Repeated cropping and short rotations (mainly in the eastern States) are believed to have led to the decline in yield to 1900, while fallowing and the widespread use of artificial fertilisers contributed to the increased yields in the decade following. The increase in yield since 1950 has been generally ascribed to the impact of improved pastures and ley-farming (broadly, the alternation of crops and pastures) upon soil fertility in wheat-growing areas. The production and yield per acre of wheat for each year from 1935–36 to 1967–68 are shown on plate 41, page 839.

WHEAT FOR GRAIN: AVERAGE AREA AND PRODUCTION AUSTRALIA, 1861 TO 1967-68

Period	*Area*	*Production*	*Yield per acre*
	'000 acres	'000 bushels	bushels
Yearly average—			
1861–70 . . .	831	10,622	12.8
1871–80 . . .	1,646	17,711	10.8
1881–90 . . .	3,258	26,992	8.3
1891–1900 . . .	4,087	29,934	7.3
1901–10 . . .	5,711	56,058	9.8
1911–20 . . .	8,928	95,480	10.7
1921–30 . . .	11,291	135,400	12.0
1931–40 . . .	14,176	177,758	12.5
1941–50 . . .	11,358	145,599	12.8
1951–60 . . .	10,164	173,622	17.1
Year—			
1967–68 . . .	22,441	277,289	12.4

Price of wheat

The prices charged by the Australian Wheat Board for wheat sold to millers for gristing into flour for consumption in Australia and for wheat sold as stock feed were as follows: year ended 30 November 1965, $1.47; 1966, $1.53; 1967, $1.57; 1968, $1.66; and 1969, $1.71. These prices include a loading to meet freight charges incurred on wheat shipped to Tasmania (0.83 cents in 1965; 1.66 cents in 1966; 1.50 cents in 1967 and 1968; and 1.0 cents in 1969).

The Wheat Board's monthly basic export selling prices for f.a.q. bulk wheat f.o.b. basis, both for wheat sold under the International Wheat Agreement and for 'free' wheat sold on the open market, fell in the following ranges; season ended 30 June 1965, $1.35 to $1.53; 1966, $1.38 to $1.48; 1967, $1.51 to $1.60; 1968, $1.41 to $1.49.

The 1962 International Wheat Agreement, operative from 1 August 1962 to 31 July 1967, set the maximum price at $US2.025 a bushel and the minimum at $US1.625 for f.a.q. wheat sold under the Agreement. Under the new International Grains Arrangement, which is operative from 1 July 1968, provision has been made for minimum and maximum prices for fourteen types of wheat, the basic wheat being United States Hard Red Winter No. 2 Ordinary Protein, the minimum price for which has been fixed at $US1.73 per bushel. The minimum price per bushel for No. 1 Manitoba Northern Wheat is now $US1.955 and for Australian f.a.q. wheat $US1.68 (*see* page 836 for a description of the International Grains Arrangement).

Details of export prices of wheat in earlier years, including those received for wheat sold under the terms of the 1949–1953 International Wheat Agreement, are given in Year Book No. 40, pages 849–50, and in the statistical bulletin *The Wheat Industry, Australia*, No. 99, March 1961, and in previous issues of these publications.

Value of the wheat crop

The estimated gross value of the wheat crop in each State and in Australia during the season 1967–68 and the value per acre are shown below.

WHEAT FOR GRAIN: VALUE OF CROP(*a*), STATES, 1967-68

		N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*(*b*)
Aggregate value	$'000	136,434	43,856	42,339	42,183	170,102	462	435,443
Value per acre	$	16.61	13.60	28.67	14.73	25.59	38.44	19.40

(*a*) Gross value of total crop, including wheat used for seed and for stock feed on farms. Also includes payment of $43,464,000 by the Commonwealth Government. (*b*) Includes the Australian Capital Territory.

Production and disposal of wheat in Australia

In the following tables details are given of Australian Wheat Board transactions and of total production and disposal of wheat during each of the years ended 30 November 1964 to 1968.

AUSTRALIAN WHEAT BOARD
WHEAT RECEIVED, STATES, 1963-64 TO 1967-68 HARVESTS
('000 bushels)

Pool	*Harvest*	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
27 . .	1963–64	110,722	77,728	20,330	51,660	47,071	325	307,837
28 . .	1964–65	137,494	80,685	20,712	49,991	57,440	188	346,511
29 . .	1965–66	27,558	60,923	13,701	36,160	95,837	217	234,396
30 . .	1966–67	184,643	74,619	32,884	50,007	96,823	247	439,224
.. . .	1967–68	73,005	27,814	24,367	22,083	99,946	154	247,369

Stocks of wheat (including flour in terms of wheat) held by the Australian Wheat Board in each State at 30 November for the years 1964 to 1968 are shown in the following table. These data relate to stocks held at mills, sidings, ports, and depots as recorded by the Australian Wheat Board.

AUSTRALIAN WHEAT BOARD: STOCKS(*a*) OF WHEAT (INCLUDING FLOUR IN TERMS OF WHEAT), STATES, 30 NOVEMBER 1964 TO 1968
('000 bushels)(*b*)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
1964 . . .	7,340	7,490	806	3,048	1,257	472	20,413
1965 . . .	15,265	3,716	862	2,602	1,556	382	24,383
1966 . . .	3,406	6,020	343	2,623	3,626	529	16,547
1967 . . .	43,238	22,709	596	8,160	5,285	536	80,524
1968 . . .	10,668	13,076	612	6,801	19,954	351	51,462

(*a*) Held at mills, sidings, ports and depots. Excludes new season's wheat received from growers prior to 30 November of years shown. (*b*) One short ton (2,000 lb) of flour is taken as being equivalent to 46.3 bushels of wheat.

Particulars of the disposal of wheat during the years ended 30 November 1964 to 1968, as recorded by the Australian Wheat Board, are shown in the following table.

AUSTRALIAN WHEAT BOARD: DISPOSAL OF WHEAT, 1964 TO 1968

('000 bushels)

	Year ended 30 November—				
	1964	*1965*	*1966*	*1967*	*1968*
Exported as wheat	221,530	243,725	158,104	293,958	187,996
Exported as flour(*a*) . . .	31,797	23,318	16,615	19,329	19,314
Sold for local consumption as flour	42,954	44,160	44,164	43,845	45,025
Sold for other purposes . . .	13,658	30,556	22,705	17,384	25,006

(*a*) Includes wheat equivalent of manufactured wheat products exported.

A summary of *all* transactions in wheat for Australia, as distinct from those recorded for the Wheat Board above, appears in the following table.

WHEAT: PRODUCTION AND DISPOSAL, AUSTRALIA, 1964 TO 1968

(million bushels)(*a*)

	Year ended 30 November—				
	1964	*1965*	*1966*	*1967*	*1968*
Opening stocks (including flour) (*b*)(*c*)(*d*) .	23.3	20.4	24.4	16.5	80.5
Production	327.9	368.8	259.7	466.6	277.3
Total available supplies . . .	*351.2*	*389.2*	*284.1*	*483.1*	*357.8*
Exports—					
Wheat	221.5	244.5	163.1	293.5	187.7
Flour(*b*)	34.3	23.8	16.2	19.7	19.2
Breakfast foods and other products(*b*)(*d*)	0.7	0.7	0.7	0.9	1.0
Local consumption—					
Flour(*b*)(*d*)	43.0	44.2	44.2	43.8	45.0
Breakfast foods and other products(*b*)(*d*)	1.7	1.9	2.4	1.8	2.4
Stock feed wheat sales(*d*) . . .	12.0	28.7	20.3	15.6	22.6
Seed	16.6	16.3	19.1	20.9	24.4
Retained on farm (excluding seed) .	3.4	6.0	6.2	6.5	5.6
Closing stocks (including flour)(*b*)(*c*)(*d*) .	20.4	24.4	16.5	80.5	51.5
Total disposals	*353.6*	*390.5*	*288.7*	*483.2*	*359.4*
Excess (+) or deficiency (—) of disposals in relation to available supplies(*e*) . .	+2.4	+1.3	+4.6	+0.1	+1.6

(*a*) One short ton (2,000 lb) of flour is taken as being equivalent to 46.3 bushels of wheat. (*b*) In terms of wheat. (*c*) Held at ports, depots, mills, and sidings. (*d*) *Source:* Australian Wheat Board. (*e*) Includes allowance for unrecorded movements in stocks, gain or loss in out-turn, etc.

The *Wheat Industry Stabilization Act* 1948 empowered the Minister to arrange with the Commonwealth Bank for advances to the Board, the advances being guaranteed by the Commonwealth Government. These provisions have been continued in the subsequent legislation, with the exception that advances are now arranged through the Reserve Bank.

AUSTRALIAN WHEAT BOARD: FINANCIAL OPERATIONS, 1963–64 TO 1967–68

($'000)

	No. 27 Pool (*1963–64 Harvest*)	*No. 28 Pool* (*1964–65 Harvest*)	*No. 29 Pool(a)* (*1965–66 Harvest*)	*No. 30 Pool(a)* (*1966–67 Harvest*)	(*1967–68 Harvest*)
Paid to growers	373,254	409,337	288,983	491,747	229,247
Rail freight	49,270	57,765	34,605	76,536	41,865
Expenses	17,990	21,298	20,219	32,494	29,044
Total payments	*440,514*	*488,400*	*343,807*	*600,777*	*300,156*
Value of sales delivered	(*b*)439,262	(*c*)471,052	(*d*)335,647	(*e*)636,346	(*f*)351,064

(*a*) Incomplete. (*b*) Subject to additional $1,892,000 provided by the Commonwealth Government and payment of $640,000 to Wheat Industry Research Fund. (*c*) Subject to additional $18,069,000 provided by the Commonwealth Government and payment of $722,000 to Wheat Industry Research Fund. (*d*) Subject to additional $16,154,000 provided by the Commonwealth Government and payment of $586,000 to Wheat Industry Research Fund. (*e*) Subject to additional $15,508,000 provided by the Commonwealth Government and payment of $1,097,000 to Wheat Industry Research Fund. (*f*)Subject to an estimated additional $43 464,000 to be provided by the Commonwealth Government and payment of $616,000 to Wheat Industry Research Fund.

Details of earlier pools will be found in previous issues of the Year Book.

Imports of wheat

Wheat and flour have been imported in substantial quantities on three occasions since 1900; in 1902–3 the wheat harvest was only 12,378,000 bushels, and wheat and flour equivalent to 12,468,000 bushels of wheat where imported. An equivalent of 7,279,000 bushels was imported in 1914–15 to supplement the yield of 25 million bushels produced in that season. Owing to drought conditions in 1957–58 supplies of high protein wheat were insufficient for local requirements and, as a result, 1,485,000 bushels were imported from Canada in 1958. No wheat has since been imported.

Exports of wheat and flour

Statistics in the following three tables are for years ended 30 June and relate to the exports of *Australian produce* only.

WHEAT AND FLOUR: EXPORTS, AUSTRALIA, 1963–64 TO 1967–68

	Quantity				*Value*		
		Flour					
Year	*Wheat*	*As flour (a)*	*In terms of wheat(b)*	*Total (in terms of wheat)*	*Wheat*	*Flour(a)*	*Total*
	'000 bushels	short tons	'000 bushels	'000 bushels	$'000 f.o.b.	$'000 f.o.b.	$'000 f.o.b.
1963–64 . .	253,724	714,939	33,102	286,826	362,018	43,758	405,776
1964–65 . .	209,980	598,037	27,689	237,669	297,199	39,122	336,321
1965–66 . .	189,479	416,201	19,270	208,749	264,062	26,526	290,588
1966–67 . .	239,051	379,352	17,564	256,615	361,227	24,600	385,827
1967–68 . .	238,778	406,847	18,837	257,613	342,767	24,303	367,070

(*a*) White flour (plain and self-raising), sharps and wheatmeal for baking. (*b*) One short ton (2,000 lb) of flour is taken as being equivalent to 46.3 bushels of wheat.

WHEAT: EXPORTS TO VARIOUS COUNTRIES, AUSTRALIA, 1963–64 TO 1967–68

('000 bushels)

Country to which exported	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
China (mainland)	93,440	83,623	74,131	79,523	88,781
India	7,572	17,543	6,650	14,721	25,299
United Kingdom	28,146	19,132	23,293	14,233	23,622
Japan	18,800	16,276	13,357	15,851	22,484
Pakistan	2,044	2,173	1,569	25,863	11,476
Malaysia	149	(*a*)3,669	(*a*)3,758	9,244	9,374
Singapore	1,588	(*b*)	(*b*)4,479	7,403	9,297
Iraq	4,876	2,450	45	4,902	7,221
Chile	..	..	..	1,725	6,271
Netherlands	..	..	..	4,406	4,479
Hong Kong	2,051	2,169	2,859	3,627	4,015
Brazil	..	..	..	3,819	3,688
Other(*c*)	95,058	62,945	59,338	53,734	22,771
Total	**253,724**	**209,980**	**189,479**	**239,051**	**238,778**

(*a*) Includes Singapore from 1 July 1964 to 30 September 1965. (*b*) Included in Malaysia from 1 July 1964 to 30 September 1965. (*c*) Includes particulars of shipments made 'for orders' which could not be classified to countries.

The following table shows the exports of flour to various countries for each of the years 1963–64 to 1967–68. The figures relate to exports of white flour (plain and self-raising), sharps and wheatmeal for baking.

FLOUR: EXPORTS TO VARIOUS COUNTRIES, AUSTRALIA, 1963–64 TO 1967–68

(Short tons)

Country to which exported	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Ceylon	115,273	191,144	170,083	144,982	160,620
Indonesia	5,080	9,124	3,086	24,766	65,564
Fiji	37,993	34,915	34,219	24,642	33,735
Papua and New Guinea	11,516	13,871	14,889	16,139	17,804
Mauritius	21,279	19,847	11,817	12,147	17,372
Saudi Arabia	12,564	15,822	16,692	12,111	17,183
Trucial States	(*a*)	10,965	8,114	8,489	12,207
United Kingdom	48,744	45,579	33,075	19,411	11,090
Malawi	(*a*)	8,360	6,192	7,413	10,483
South Arabia, Federation of	40,675	44,990	29,968	25,272	9,958
Guyana	643	2,381	2,463	2,171	7,378
Muscat and Oman	(*a*)	4,661	4,731	5,255	5,587
Other(*b*)	421,172	196,378	80,872	76,554	37,866
Total	**714,939**	**598,037**	**416,201**	**379,352**	**406,847**

(*a*) Not recorded separately. (*b*) Includes particulars which could not be classified to countries.

World area and production of wheat

The figures in the following table of the world area and production of wheat by principal countries and by continents have been compiled from statistics published by the International Wheat Council. Harvests in the northern hemisphere occur in the first of the two years mentioned in each column heading, and in the southern hemisphere at the end of that year and the beginning of the next. Harvests of the northern hemisphere countries are thus combined with those of the southern hemisphere which immediately follow; e.g. in 1967–68 the Canadian harvest occurred from August to September 1967 and the Australian harvest from October 1967 to February 1968.

WHEAT: AREA, PRODUCTION AND YIELD PER ACRE IN VARIOUS COUNTRIES 1965–66 TO 1967–68

(*Source for countries other than Australia:* International Wheat Council—*World Wheat Statistics*)

	Area			*Production*			*Yield per acre*		
Continent and country	*1965–66*	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
	'000 acres	'000 acres	'000 acres	mill. bus	mill. bus	mill. bus	bus	bus	bus
U.S.S.R. (Europe and Asia)	173,477	172,866	165,624	2,193	3,693	2,840	12.6	21.4	17.1
Europe—									
France	11,169	9,864	9,709	542	415	525	48.6	42.1	54.1
Italy	10,596	10,561	9,914	359	345	353	33.9	32.7	35.6
Romania . . .	7,371	7,497	7,198	218	186	214	29.6	24.8	29.7
Germany, Federal Republic	3,489	3,432	3,494	160	167	214	45.8	48.5	61.2
Total, Europe(a) .	*70,929*	*68,826*	*68,741*	*2,471*	*2,301*	*2,658*	*34.8*	*33.4*	*38.7*
Asia—									
China (mainland)(*b*) .	61,801	60,500	60,500	827	764	845	13.4	12.6	14.0
India	33,260	31,273	31,723	452	383	419	13.6	12.2	13.2
Turkey	19,840	19,938	20,045	317	357	372	16.0	17.9	18.5
Iran	4,999	5,298	n.a.	110	161	170	22.0	30.4	n.a.
Total, Asia(a) . .	*150,981*	*146,270*	*148,741*	*2,137*	*2,035*	*2,244*	*14.2*	*13.9*	*15.1*
North and Central America—									
United States . . .	49,599	49,867	58,771	1,316	1,312	1,522	26.5	26.3	25.9
Canada	28,301	29,692	30,121	649	827	593	22.9	27.9	19.7
Total, North and Central America(a) .	*79,592*	*81,345*	*91,107*	*2,025*	*2,199*	*2,201*	*25.5*	*27.0*	*24.2*
South America—									
Argentina . . .	11,369	12,884	14,470	223	230	269	19.6	17.8	18.6
Total, South America(a)	*16,247*	*17,520*	*18,829*	*310*	*310*	*347*	*19.2*	*17.8*	*18.5*
Oceania—									
Australia . . .	17,515	20,823	22,441	260	467	277	14.8	22.4	12.4
Total, Oceania(a) .	*17,715*	*21,043*	*22,745*	*270*	*478*	*293*	*15.4*	*22.7*	*12.9*
Africa	19,917	19,225	19,744	212	193	219	10.6	10.0	11.1
World total(*a*) . .	**528,858**	**527,095**	**535,531**	**9,618**	**11,209**	**10,802**	**18.2**	**21.3**	**20.2**

(*a*) Includes allowances for any missing data for countries shown and for other producing countries not shown. (*b*) International Wheat Council estimate.

Principal wheat exporting and importing countries

The following table shows world exports of wheat and wheat flour (in terms of wheat) by the major wheat exporting countries, according to continents and countries of primary destination, based on statistics recently published by the International Wheat Council. While Australia's production of wheat has averaged about three per cent of the world's total during recent years, its exports account for a much higher proportion of the total quantities shipped. For the three years ended 1967–68 Australia's share of the world wheat exports has averaged 12 per cent.

WORLD EXPORTS OF WHEAT AND WHEAT FLOUR IN TERMS OF WHEAT 1963–64 TO 1967–68

(*Source:* International Wheat Council—*World Wheat Statistics*)

(Million bushels)

Year and country of primary destination	*Exporting country*							
	U.S.A.	*Canada*	*Australia*	*U.S.S.R.*	*France*	*Argentina*	*Other*	*Total*
1967–68p—								
Asia(*a*)—								
India	212.0	12.7	25.3	..	..	..	0.5	250.5
China (mainland)	..	50.2	88.8	..	13.3	0.4	..	152.7
Japan	81.8	40.3	22.5	..	0.1	..	..	144.7
Pakistan	76.4	0.9	1.1	..	..	..	1.5	79.9
Korea, South	35.1	..	..	..	..	..	..	35.1
Other	85.8	8.1	60.0	3.1	10.4	0.2	18.6	186.2
Total, Asia	*491.1*	*112.2*	*197.7*	*3.1*	*23.8*	*0.6*	*20.6*	*849.1*
Europe(*a*)—								
United Kingdom	10.2	69.0	24.1	5.5	11.4	1.6	27.6	149.4
Germany, Federal Republic of	12.3	16.9	0.6	0.6	14.3	..	15.8	60.5
Czechoslovakia	..	5.3	..	42.1	..	..	6.0	53.4
Germany, East	..	..	..	47.0	..	..	2.8	49.8
Poland	1.5	3.9	..	34.5	9.0	..	..	48.9
Netherlands	20.6	5.3	4.5	5.2	8.7	0.9	3.3	48.5
Italy	6.8	8.7	..	3.5	7.3	14.4	0.1	40.8
Other	32.6	22.2	4.1	3.5	16.1	2.7	14.1	95.3
Total, Europe	*84.0*	*131.3*	*33.3*	*141.9*	*66.8*	*19.6*	*69.7*	*546.6*
Africa—								
United Arab Republic	0.9	..	..	28.3	20.0	..	36.3	85.5
Other	50.5	8.6	8.4	1.4	33.1	0.7	20.9	123.6
Total, Africa	*51.4*	*8.6*	*8.4*	*29.7*	*53.1*	*0.7*	*57.2*	*209.1*
South America—								
Brazil	48.1	..	3.7	1.9	5.6	14.3	13.5	87.1
Other	55.2	3.6	9.6	..	1.8	15.1	13.1	98.4
Total, South America	*103.3*	*3.6*	*13.3*	*1.9*	*7.4*	*29.4*	*26.6*	*185.5*
U.S.S.R.	..	50.4	..	..	..	..	6.0	56.4
North and central America	19.5	20.9	0.1	10.2	3.3	..	2.0	56.0
Oceania	0.1	..	4.7	..	0.9	..	..	5.8
All other	3.5	..	..	..	0.1	..	1.4	5.0
World total, 1967-68	**752.9**	**327.1**	**257.6**	**186.8**	**155.4**	**50.2**	**183.5**	**1,913.5**
1966–67	734.1	545.0	256.6	151.6	112.8	112.4	151.0	2,062.5
1965–66	859.7	545.0	208.7	80.9	175.7	292.0	134.0	2,296.0
1964–65	720.4	437.6	237.7	42.6	169.6	163.3	110.0	1,881.2
1963–64	848.7	554.4	287.1	47.1	98.5	102.0	134.3	2,072.1

(*a*) Excludes U.S.S.R., details for which are shown separately.

The above particulars are based on customs clearances of the exporting countries, and relate to years ended 30 June. There are small differences between Australian exports as shown and those on pages 843–4 due in part to the use by the International Wheat Council of a slightly different factor to convert flour to wheat equivalent.

Oats

This cereal is widely grown in all agricultural areas which have autumn, winter and spring rainfall; it is tolerant of wet conditions and heavy soils. It has excellent feed value and produces a higher yielding crop than other winter cereals. It needs less cultivation, but requires ample fertiliser. Oats has a variety of uses—as a pasture plant when rough sown into stubble or heavy clover pastures, as silage if cut before maturity, as a hay crop when mown and baled or cut for chaff, or as a grain when stripped (the stubble then being grazed off). The grain is sold on a 'fair average quality' basis through voluntary pools in Victoria, South Australia and Western Australia.

Oats area, production and yield per acre

Oats is usually next in importance to wheat among the grain crops cultivated in Australia. However, while wheat grown for grain in 1967–68 accounted for 56 per cent of the area of all crops, oats grown for grain represented only 8 per cent.

OATS FOR GRAIN: AREA, PRODUCTION AND YIELD PER ACRE STATES AND AUSTRALIAN CAPITAL TERRITORY, 1936-37 TO 1967-68

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*A.C.T.*	*Aust.*
AREA ('000 ACRES)								
Average for three years ended—								
1938–39	297	478	8	338	425	26	..	1,572
1948–49	515	548	21	282	484	17	1	1,868
1958–59	756	735	29	445	1,178	20	..	3,163
Year—								
1963–64	794	910	31	501	1,125	30	1	3,392
1964–65	850	966	55	444	1,152	28	1	3,497
1965–66	1,033	966	45	455	1,240	28	1	3,768
1966–67	1,363	1,079	66	509	1,204	36	2	4,258
1967–68	907	723	31	525	1,158	35	1	3,380
PRODUCTION ('000 BUSHELS)(*a*)								
Average for three years ended—								
1938–39	4,065	4,781	65	2,575	4,159	810	6	16,461
1948–49	7,166	9,757	324	3,606	5,355	406	7	26,621
1958–59	12,619	14,140	547	7,911	15,606	409	10	51,242
Year—								
1963–64	19,812	19,885	673	9,149	17,850	844	22	68,234
1964–65	22,885	22,446	1,171	8,977	14,011	520	32	70,043
1965–66	12,607	17,784	735	5,622	23,279	677	37	60,739
1966–67	41,003	31,248	1,467	10,276	22,117	948	47	107,106
1967–68	8,235	6,859	450	3,299	19,759	1,014	12	39,628
YIELD PER ACRE (BUSHELS)(*a*)								
Average for three years ended—								
1938–39	13.7	10.0	8.1	7.6	9.8	3.1	24.3	10.5
1948–49	13.9	17.8	15.4	12.8	11.1	2.4	11.8	14.3
1958–59	16.7	19.2	18.9	17.8	13.3	20.5	22.5	16.2
Year—								
1963–64	24.9	21.8	21.7	18.3	15.9	27.8	19.8	20.1
1964–65	26.9	23.2	21.1	20.2	12.2	18.5	21.6	20.0
1965–66	12.2	18.4	16.3	12.4	18.8	23.9	25.6	16.1
1966–67	30.1	29.0	22.1	20.2	18.4	26.4	26.2	25.2
1967–68	9.1	9.5	14.6	6.3	17.1	28.7	20.3	11.7

(*a*) 40 lb per bushel.

Graphs showing the area sown to oats and production of oats in Australia appear on pages 993 and 995 of Year Book No. 49, and a map showing the distribution of areas growing oats for grain throughout Australia in 1962–63 appears on page 1015 of Year Book No. 50. The area sown to oats from 1900–01 is shown in plate 40, page 828.

In 1967–68 production and yield per acre of oats for Australia were seriously affected by drought conditions in the eastern States. Production of 39,628,000 bushels was the lowest recorded since 1957–58. It was 63 per cent below the record production in 1966–67.

Value of oat crop

The average wholesale price in the Melbourne market for oats of good milling quality was $1.13 per bushel in 1967–68, compared with $0.80 in 1966–67. The estimate gross value of the oat crop in each State for the 1967–68 season and the value per acre were as follows.

OATS FOR GRAIN: VALUE OF CROP, STATES, 1967-68

		N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.(a)*
Aggregate value	$'000	8,729	6,723	428	3,197	14,106	1,009	34,205
Value per acre	$	9.62	9.30	13.91	6.09	12.18	28.53	10.12

(*a*) Includes the Australian Capital Territory.

Exports of oats

OATS: EXPORTS, AUSTRALIA, 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Quantity . . .	'000 bus	16,673	20,161	13,825	22,134	10,033
Value . . .	$'000 f.o.b.	12,623	15,616	11,980	17,450	8,407

In 1967–68 the principal countries of destination were the Netherlands (3,213,000 bushels), the Federal Republic of Germany (2,387,000 bushels), Japan (809,000 bushels), the United States of America (623,000 bushels) and South Africa (542,000 bushels).

Oatmeal and other oat products

In 1967–68 the production of granulated or rolled oats or oatmeal (kilned and unkilned) for breakfast foods, porridge and other purposes was 21,518 tons.

World production of oats

The world production of oats for the year 1967, according to figures issued by the United States Department of Agriculture, amounted to 3,255 million bushels, harvested from 74.2 million acres, resulting in an average yield of 43.9 bushels an acre. This compared with an estimated production in the previous year of 3,109 million bushels from an area of 73.6 million acres and an average yield of 42.2 bushels an acre.

Barley

This cereal contains two main groups of varieties, 2-row and 6-row. The former is generally, but not exclusively, preferred for malting purposes. Barley was formerly stubble-sown, but is now grown principally on pasture land worked up early in the year of sowing. In this way it forms an important phase in the rotation of crops. Like oats, it may also be sown for fodder production or for grain. When sown for fodder, sowing may take place either early or late in the season, as it has a short growing period. It may thus provide grazing or fodder supplies when other sources are not available. Barley grain may be crushed to meal for stock (especially pigs) or sold for malting.

Crops sown for malting purposes require well-worked, weed-free paddocks of even soil, and are thus restricted to specific districts. The main barley-growing areas in Australia are situated in South Australia (Murray-Mallee, Eyre and Yorke Peninsulas), but considerable quantities are grown also in New South Wales, Victoria, Queensland and Western Australia.

Barley boards

The bulk of the barley crop in the various States is acquired and marketed by grower-controlled boards. Pooled returns from sales are distributed to growers at standard rates for the individual grades and varieties delivered. The Victorian and South Australian crops are marketed by the

Australian Barley Board (a joint board established by the two State Governments), and the Queensland and Western Australian Barley Boards handle the crops of their respective States. Particulars of the proportion of barley production which was received by the Australian Barley Board (for Victoria and South Australia), together with details of quantity sold, advances and total payments to growers, are presented below.

AUSTRALIAN BARLEY BOARD: BARLEY RECEIVED, SOLD, ETC. 1963-64 TO 1967-68

Pool	*Quantity received*	*Quantity sold(a)*	*Total advances made per bushel on 2-row No. 1 grade less freight*	*Total net payments to growers*
	'000 bushels	'000 bushels	$	$'000
No. 25 (1963–64 Crop)	23,145	23,204	1.1862	22,446
„ 26 (1964–65 „)	25,465	25,404	1.2000	25,184
„ 27 (1965–66 „)	14,922	14,894	1.2873	14,824
„ 28 (1966–67 „)	22,043	22,026	1.2515	22,759
„ 29 (1967–68 „)	7,985	7,914	(*b*)1.1800	(*b*)7,005

(*a*) Includes surplus or shortage in out-turn except for No. 29 Pool for which the surplus has not yet been ascertained. (*b*) As at 31 May 1969. At that date it was estimated that the amount still to be paid to growers was 6.347 cents per bushel.

Barley area, production and yield per acre

There was a substantial increase in the area of barley sown for grain (particularly in Western Australia and Queensland) in the years up to 1960–61, and in that year the area sown reached the record level of 2,830,000 acres. However, the area sown in 1967–68, 2,611,000 acres, was 8 per cent less than the area in 1960–61. The production of barley for grain in 1967–68, 36,798,000 bushels, was 46 per cent less than the record production of 67,970,000 bushels in 1960–61, and was the lowest recorded production since 1959–60. The area, production and yield per acre of barley for grain in the several States for the years 1963–64 to 1967–68, compared with the averages for the three-year periods ended 1938–39, 1948–49 and 1958–59 are shown in the following table. Separate details for 2-row and 6-row varieties are shown for all States for 1967–68. The area sown to barley from 1900–01 is shown in plate 40, page 828.

BARLEY FOR GRAIN: AREA, PRODUCTION AND YIELD PER ACRE STATES AND AUSTRALIAN CAPITAL TERRITORY, 1936-37 TO 1967-68

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*A.C.T.*	*Aust.*
AREA ('000 ACRES)								
Average for three years ended—								
1938–39	13	138	10	391	53	8	..	613
1948–49	23	166	18	587	65	7	..	866
1958–59	73	354	184	1,255	324	8	..	2,198
Year—								
1963–64	212	190	176	1,123	299	14	..	2,013
1964–65	239	187	225	1,095	303	15	..	2,064
1965–66	236	192	338	1,098	413	20	..	2,298
1966–67	385	228	384	1,107	373	21	..	2,498
1967–68—								
2-row	257	287	309	1,097	101	23	..	2,074
6-row	111	18	33	60	315	1	..	538
Total	*367*	*305*	*342*	*1,157*	*416*	*24*	..	*2,611*

BARLEY FOR GRAIN: AREA, PRODUCTION AND YIELD PER ACRE STATES AND A.C.T., 1936–37 TO 1967–68—*continued*

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*A.C.T.*	*Aust.*
PRODUCTION ('000 BUSHELS)(*a*)								
Average for three years ended—								
1938–39 . .	197	2,174	135	6,816	660	252	..	10,234
1948–49 . .	316	3,149	375	11,964	748	194	..	16,746
1958–59 . .	1,463	7,192	4,673	29,740	4,239	267	..	47,574
Year—								
1963–64 . .	5,351	4,026	5,191	24,337	4,077	414	..	43,395
1964–65 . .	6,707	4,335	7,111	26,932	3,701	529	..	49,315
1965–66 . .	3,801	3,218	9,137	18,514	6,481	684	..	41,835
1966–67 . .	11,796	5,421	13,194	23,698	6,707	772	..	61,588
1967–68—								
2-row . .	3,474	2,550	8,208	11,887	1,753	859	..	28,731
6-row . .	1,360	158	757	492	5,274	25	..	8,067
Total . .	*4,834*	*2,709*	*8,965*	*12,380*	*7,027*	*884*	..	*36,798*
YIELD PER ACRE (BUSHELS)(*a*)								
Average for three years ended—								
1938–39 . .	15.2	15.7	13.5	17.4	12.5	31.5	52.3	16.7
1948–49 . .	13.7	19.0	20.8	20.4	11.5	27.7	19.5	19.3
1958–59 . .	20.0	20.3	25.4	23.7	13.1	33.4	..	20.7
Year—								
1963–64 . .	25.3	21.2	29.5	21.7	13.6	30.0	..	21.6
1964–65 . .	28.1	23.2	31.6	24.6	12.2	34.2	..	23.9
1965–66 . .	16.1	16.7	27.0	16.9	15.7	34.4	..	18.2
1966–67 . .	30.6	23.8	34.4	21.4	18.0	36.7	..	24.7
1967–68—								
2-row . .	13.5	8.9	26.5	10.8	17.4	36.9	..	13.9
6-row . .	12.3	8.8	22.9	8.2	16.7	31.7	..	15.0
Total . .	*13.2*	*8.9*	*26.2*	*10.7*	*16.9*	*36.8*	..	*14.1*

(*a*) 50 lb per bushel.

For Australia, 79 per cent of the area of barley for grain in 1967–68 was sown with 2-row barley, while the remainder consisted of 6-row varieties. The proportion, however, varied considerably in the several States. The utilisation of barley during the season ended November 1968 was as follows: exports, 5,655,000 bushels; malting and distilling, 13,280,000 bushels; pearl barley, 141,000 bushels; seed, 3,400,000 bushels.

BARLEY FOR GRAIN, 2- AND 6-ROW: AREA AND PRODUCTION AUSTRALIA, 1936-37 TO 1967-68

Period	*Area ('000 acres)*			*Production ('000 bushels)(a)*			*Yield per acre (bushels)(a)*		
	2-row	*6-row*	*Total*	*2-row*	*6-row*	*Total*	*2-row*	*6-row*	*Total*
Average for three years ended—									
1938–39 . .	523	90	613	8,963	1,271	10,234	17.1	14.1	16.7
1948–49 . .	769	97	866	15,142	1,604	16,746	19.7	16.5	19.3
1958–59 . .	1,809	389	2,198	41,633	5,941	47,574	23.0	15.3	20.7
Year—									
1963–64 . .	1,621	392	2,013	36,464	6,931	43,395	22.5	17.7	21.6
1964–65 . .	1,655	409	2,064	41,775	7,540	49,315	25.2	18.4	23.9
1965–66 . .	1,766	531	2,298	33,235	8,600	41,835	18.8	16.2	18.2
1966–67 . .	1,951	546	2,498	49,207	12,381	61,588	25.2	22.7	24.7
1967–68 . .	2,074	538	2,611	28,731	8,067	36,798	13.9	15.0	14.1

(*a*) 50 lb per bushel.

A graph showing the production of barley in Australia since 1935–36 appears on page 995 of Year Book No. 49, and a map showing the distribution of barley growing areas throughout Australia in 1962–63 appears on page 1014 of Year Book No. 50.

Value of barley crop

The average wholesale price for 2-row English malting barley in the Melbourne market was $1.53 per bushel in 1967–68 compared with $1.48 in 1966–67. The estimated gross value of the barley crop in each State for the 1967–68 season and the value per acre are shown in the following table.

BARLEY FOR GRAIN: VALUE OF CROP, STATES, 1967-68

		N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
Aggregate value	$'000	6,456	3,261	10,683	12,818	7,690	1,314	42,222
Value per acre	$	17.57	10.69	31.19	11.08	18.50	54.63	16.17

Exports of barley

Western Australia is the principal exporting State, and Japan, Saudi Arabia, China (Taiwan) and the United Kingdom were the principal countries to which barley was shipped in 1967–68. Particulars of exports of Australian-produced barley for the years 1963–64 to 1967–68 are shown in the following table.

BARLEY: EXPORTS, AUSTRALIA, 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Quantity	'000 bus	17,756	16,281	9,994	18,718	5,701
Value	$'000 f.o.b.	18,299	18,002	11,508	21,569	6,569

In addition to exports of barley grain, there are also exports of Australian pearl and Scotch barley, the total for 1967–68 amounting to 89,000 lb, valued at $7,000, the main countries of consignment being Malaysia and Mauritius. Imports of barley into Australia amounted to 6,563,000 lb, valued at $164,000 during 1967–68.

Barley malt

Details of the recorded usage of barley and the production of barley malt in the years 1963–64 to 1967–68 are given in the following table.

BARLEY MALT: GRAIN USED AND MALT PRODUCED, AUSTRALIA
1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Barley used . .	. '000 bus(*a*)	11,886	11,667	12,883	13,601	13,003
Malt produced .	. '000 bus(*b*)	11,988	12,127	13,235	14,027	13,547

(*a*) 50 lb per bushel. (*b*) 40 lb per bushel.

Since 1952–53 the production of malt in Australia has been sufficient to meet local requirements and to provide a margin for export. Exports of Australian produce amounting to 5,235,000 bushels (value $10,543,000) and 4,469,000 bushels (value $9,362,000) were recorded in 1966–67 and 1967–68 respectively.

World production of barley

In comparison with the barley production of other countries that of Australia is extremely small. The main producers in 1967 were the Union of Soviet Socialist Republics, France and the United Kingdom. China is also normally a major producer, but details for 1967 are not available. Australian production in that year was approximately 1 per cent of the world total.

According to estimates made by the United States Department of Agriculture, world production of barley in the year 1967 amounted to 4,734 million bushels harvested from 158.5 million acres, equivalent to a yield per acre of 29.9 bushels. This compared with the production of 4,593 million bushels in the previous year from 153.8 million acres, giving a similar yield per acre.

Sorghum

Grain sorghum is a summer-growing annual palatable to stock and more drought and frost-resistant than maize. It requires a summer rainfall. The growing of this crop for grain on an extensive scale is a comparatively recent development in Australia, and, as with other cereals, operations are highly mechanised.

The climatic conditions of Queensland and northern New South Wales are particularly suited to the growing of sorghum, and development has so far been restricted mainly to these areas, more particularly to Queensland. The grain produced is fed to livestock and has become an important source for supplementing other coarse grains for this purpose. Other sorghums are grown in Australia mainly as green fodder, hay and silage (sweet sorghums and Sudan grass) and for the production of brush for broom manufacture (broom millet). In Queensland the growing of grain sorghum is concentrated in the Burnett, Dawson-Callide areas and in the central highlands. In New South Wales the north-western slopes and Murrumbidgee Irrigation Areas are the main areas. This crop is also suitable for the semi-tropical areas of the Northern Territory, where development is proceeding, and the Kimberleys.

GRAIN SORGHUM: AREA, PRODUCTION AND YIELD PER ACRE, STATES 1963-64 TO 1967-68

	Area			*Production(a)*			*Yield per acre(a)*		
Year	*N.S.W.*	*Qld*	*Aust. (b)*	*N.S.W.*	*Qld*	*Aust. (b)*	*N.S.W.*	*Qld*	*Aust. (b)*
	acres	acres	acres	'000 bushels	'000 bushels	'000 bushels	bushels	bushels	bushels
1963–64	61,203	303,857	365,708	1,269	6,612	7,889	20.7	21.8	21.6
1964–65	51,699	292,769	345,737	1,270	5,883	7,164	24.6	20.1	20.7
1965–66	99,576	332,768	433,437	605	6,533	7,149	6.1	19.6	16.5
1966–67	98,161	403,500	502,349	1,527	10,172	11,711	15.6	25.2	23.3
1967–68	78,165	382,192	461,834	1,580	8,939	10,582	20.2	23.4	22.9

(*a*) 60 lb per bushel. Production in New South Wales and Queensland harvested from crop sown in previous year. (*b*) Includes small areas sown and quantities produced in other States and Territories. Excludes Northern Territory for 1967–68.

Maize

Like sorghum, maize is a summer cereal demanding specific soil and climatic conditions. For grain, it is grown almost entirely in the south-east and Atherton Tablelands of Queensland and the north coast and northern tablelands of New South Wales. On the Atherton Tablelands in Queensland, and generally in New South Wales and Victoria, it provides a stock feed for dairy cattle, fat stock and pigs. In times of drought it is used also as a sheep feed. In all States except South Australia, however, this crop is grown to some extent for green fodder and silage, particularly in connection with the dairying industry. There is practically no difference between grain and fodder varieties.

There has been a continuing increase in recent years in the growing of maize from hybrid strains of seed. Varieties have been developed which are capable of producing yields per acre considerably in excess of the older open pollinated types. The expansion in areas sown to hybrid maize has led to a parallel development in the specialised industry of growing hybrid strains for seed.

Maize area, production and yield per acre

MAIZE FOR GRAIN: AREA, PRODUCTION AND YIELD PER ACRE
STATES AND A.C.T., 1936-37 TO 1967-68

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*A.C.T.*	*Aust.*
				AREA (ACRES)				
Average for three years ended—								
1938–39	121,178	19,826	179,641	20	16	..	6	320,687
1948–49	91,612	7,511	122,263	1	87	6	1	221,481
1958–59	57,662	3,629	120,417	(*a*)	13	1	2	(*b*)181,724
Year—								
1963–64	44,679	3,399	166,598	(*a*)	85	..	..	(*b*)214,761
1964–65	41,660	2,353	168,300	..	10	..	..	212,323
1965–66	42,000	1,683	153,081	..	1	..	..	196,765
1966–67	49,019	1,407	151,010	..	5	..	..	201,441
1967–68—								
Hybrid	47,636	825	141,514	..	(*c*)	..	..	(*b*)189,975
Other	3,933	92	6,218	..	155	..	..	10,398
Total	*51,569*	*917*	*147,732*	..	*155*	..	..	*200,373*
				PRODUCTION ('000 BUSHELS)(*d*)				
Average for three years ended—								
1938–39	3,204	665	3,170	1	..	..	..	7,040
1948–49	2,446	314	2,960	..	1	..	..	5,721
1958–59	2,347	175	3,428	(*a*)	..	..	..	(*b*)5,950
Year—								
1963–64	2,089	203	4,427	(*a*)	2	..	..	(*b*)6,722
1964–65	1,878	114	4,887	..	..	..	..	6,879
1965–66	1,607	101	3,209	..	..	..	..	4,918
1966–67	2,471	72	4,948	..	..	..	..	7,491
1967–68—								
Hybrid	2,183	29	4,617	..	(*c*)	..	..	(*b*)6,829
Other	138	3	161	..	2	..	..	303
Total	*2,320*	*32*	*4,778*	..	*2*	..	..	*7,132*
				YIELD PER ACRE (BUSHELS)(*d*)				
Average for three years ended—								
1938–39	26.4	33.5	17.6	43.7	12.3	..	10.2	22.0
1948–49	26.7	41.8	24.2	6.7	7.2	14.8	13.7	25.8
1958–59	40.7	48.2	28.5	(*a*)	16.8	30.0	..	(*b*)32.7
Year—								
1963–64	46.8	59.8	26.6	(*a*)	18.5	..	..	(*b*)31.3
1964–65	45.1	48.5	29.0	..	15.6	..	..	32.4
1965–66	38.3	60.3	21.0	..	60.0	..	..	25.0
1966–67	50.4	51.3	32.8	..	12.8	..	..	37.2
1967–68—								
Hybrid	45.8	35.5	32.6	..	(*c*)	..	..	(*b*)35.9
Other	35.0	29.6	25.8	..	11.4	..	..	29.1
Total	*45.0*	*34.9*	*32.2*	..	*11.4*	..	..	*35.6*

(*a*) Not available for publication. (*b*) Incomplete. (*c*) Included in Other maize. (*d*) 56 lb per bushel. Production in New South Wales and Queensland harvested from crop sown in previous year.

The average yield for Australia for the five-year period ended 1967–68 was 32.3 bushels per acre. Among principal producing countries, the United States of America averaged 78.6 bushels per acre and Brazil 21.0 bushels for 1967.

Value of maize crop

The average wholesale price of maize in the Melbourne market in 1967–68 was $2.14 per bushel compared with $2.28 in 1966–67. The estimated gross value of the crop in each State for the 1967–68 season and the value per acre were as follows.

MAIZE FOR GRAIN: VALUE OF CROP, STATES, 1967-68

		N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
Aggregate value	$'000	3,341	48	6,071	..	3	..	9,463
Value per acre	$	64.79	52.34	41.09	..	19.35	..	47.23

Exports of maize

MAIZE: EXPORTS, AUSTRALIA, 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Quantity	'000 bus	14	20	1	80	101
Value	$'000 f.o.b.	27	42	4	114	169

Imports of maize into Australia in 1967–68 amounted to 17,000 bushels.

World production of maize

According to figures issued by the United States Department of Agriculture, world production of maize in the year 1967 amounted to 9,444 million bushels, harvested from 255 million acres, giving an average yield per acre of 37.1 bushels. This compared with production in the previous year of 8,944 million bushels from 246 million acres, and an average yield of 36.3 bushels per acre.

The United States of America is the most important maize-producing country in the world, and during the three years ended 1967 the area sown to maize in that country averaged 58 million acres or 23 per cent of the world total. During the same period production averaged 4,316 million bushels or 49 per cent of the world total.

Rice

The principal rice-growing areas of the world are confined almost entirely to Asia, although limited quantities are grown in other countries. In Australia rice was first cultivated at the Yanco Experimental Farm in New South Wales, but it was not grown commercially until 1924–25, when 16,240 bushels were produced from 153 acres. Favoured by high average yields and protected by tariff, rice culture made rapid progress in the Murrumbidgee Irrigation Areas until local requirements were met and a surplus became available for export. The acreage sown in this area is controlled, as the quantity of water available is limited.

Apart from small experimental areas in Western Australia and the Northern Territory, rice-growing in Australia is practically confined to the Murrumbidgee Irrigation Areas in New South Wales. The bulk of Australia's exports of rice in 1967–68 was shipped to Papua and New Guinea and Okinawa. Details relating to area, production, and Australian-produced exports for the years 1963–64 and 1967–68 are shown in the following table.

RICE: AREA, PRODUCTION AND EXPORTS, AUSTRALIA(*a*)
1963-64 TO 1967-68

Year	*No. of holdings growing rice(b)*	*Area*	*Production (Paddy rice)*		*Average yield (paddy) per acre*	*Imports*	*Exports*
			Quantity	*Gross value(c)*			
		acres	'000 bushels (*d*)	$'000	bushels (*d*)	'000 lb	'000 lb
1963–64	1,033	59,398	7,455	7,912	125.5	2,452	125,115
1964–65	1,074	61,617	8,030	8,529	130.3	2,987	142,724
1965–66	1,115	64,398	9,550	10,224	148.1	3,951	142,256
1966–67	1,164	73,724	11,250	12,445	152.6	3,718	198,370
1967–68	1,210	75,957	11,597	12,831	152.7	3,749	224,983

(*a*) For some years particulars of area and production for Western Australia and the Northern Territory are not available for publication, and are excluded. (*b*) Twenty acres or more in area. (*c*) Excludes the value of straw. (*d*) 42 lb per bushel.

Fodder crops

Hay

Because of the comparatively unreliable nature of rainfall in Australian agricultural and pastoral areas, hay as a fodder crop occupies a position of importance. In 1967–68 hay represented 7 per cent of the total area of crops. Up to 1946–47 hay, in terms of area, was second only to wheat for grain, but in more recent years it has been supplanted by green fodder (for feeding-off) and oats for grain. Hay is generally considered to include cereal hay, meadow hay and lucerne hay. Cereal crops cut early for hay contain a higher level of protein than those cut late.

In most European countries hay is made almost entirely from meadow pastures, but in Australia a very large proportion is made from cereals and lucerne, the hay being stored loose, in sheaves or baled. Because of its bulk, hay is usually produced for individual or local use, except in times of drought, when large inter-regional transfers may take place. Meadow hay requires greater care in preparation than cereal hay. Baling must be spaced carefully behind mowing to ensure that the bales are dry enough to prevent moulding, but not so dry as to result in excessive leaf loss. The leaves contain the bulk of the protein. Lucerne hay requires similar attention.

HAY: AREA, PRODUCTION AND YIELD PER ACRE, STATES AND TERRITORIES
1936-37 TO 1967-68

Season	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
AREA ('000 ACRES)									
Average for three years ended—									
1938–39	859	1,122	67	540	439	81	..	3	3,111
1948–49	516	642	66	287	245	93	..	3	1,852
1958–59	556	978	64	336	305	129	..	4	2,372
Year—									
1963–64	584	1,138	80	358	289	150	1	3	2,602
1964–65	600	1,306	82	314	305	180	1	3	2,793
1965–66	733	1,150	155	299	291	148	1	4	2,780
1966–67	823	1,558	129	482	295	203	1	4	3,496
1967–68	586	1,165	119	429	318	179	2	2	2,800
PRODUCTION ('000 TONS)									
Average for three years ended—									
1938–39	975	1,181	94	591	434	120	..	3	3,398
1948–49	618	987	119	396	275	153	..	4	2,552
1958–59	752	1,712	129	476	377	248	..	7	3,701
Year—									
1963–64	1,006	1,947	184	488	389	249	1	4	4,269
1964–65	1,040	2,506	167	487	390	364	1	7	4,963
1965–66	978	1,873	282	368	414	257	2	5	4,179
1966–67	1,481	2,982	314	729	417	437	2	9	6,371
1967–68	806	1,556	296	418	421	309	3	3	3,812
YIELD PER ACRE (TONS)									
Average for three years ended—									
1938–39	1.14	1.05	1.40	1.09	0.99	1.48	..	1.00	1.09
1948–49	1.20	1.54	1.80	1.38	1.12	1.65	..	1.33	1.38
1958–59	1.35	1.75	2.02	1.42	1.24	1.92	0.54	1.75	1.56
Year—									
1963–64	1.72	1.71	2.30	1.37	1.35	1.67	1.02	1.71	1.64
1964–65	1.73	1.92	2.19	1.55	1.28	2.02	1.11	1.99	1.78
1965–66	1.33	1.63	1.83	1.23	1.43	1.74	1.39	1.29	1.50
1966–67	1.80	1.91	2.44	1.51	1.41	2.15	1.63	2.14	1.82
1967–68	1.38	1.34	2.49	0.97	1.32	1.73	1.30	1.19	1.36

Plate 40 shows the area under hay since 1900–01 (page 828).

Information regarding areas cut for hay and varieties grown in 1967–68 is given in the following table.

HAY: AREA OF VARIOUS KINDS GROWN, STATES AND TERRITORIES 1967-68

(Acres)

State or Territory	*Oaten*	*Lucerne*	*Wheaten*	*Other*	*Total*
New South Wales	104,869	231,849	120,539	128,243	585,500
Victoria	393,087	78,436	110,990	582,698	1,165,211
Queensland	7,344	86,654	10,946	14,113	119,055
South Australia	157,820	48,667	81,324	141,215	429,026
Western Australia	118,478	2,431	34,717	162,297	317,923
Tasmania	22,598	2,481	735	153,024	178,838
Northern Territory . . .	..	(*a*)	..	1,919	1,919
Australian Capital Territory . .	950	1,216	140	169	2,475
Australia	**805,146**	**(*b*)451,734**	**359,391**	**1,183,678**	**2,799,947**

(*a*) Not available for publication; included in 'Other hay'. (*b*) Incomplete; excludes the Northern Territory.

For all States and the Territories combined, the proportions of the areas sown to the principal kinds of hay in 1967–68 were 28.8 per cent for oaten, 16.1 per cent for lucerne, 12.8 per cent for wheaten, and 42.3 per cent for other hay.

The following table shows the estimated gross value, and the value per acre, of the hay crop of the several States for the 1967–68 season.

HAY: VALUE OF CROP, STATES 1967-68

		N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.* (*a*)
Aggregate value	$'000	22,711	49,087	9,129	10,384	9,557	6,391	107,434
Value per acre .	$	38.79	42.13	76.68	24.20	30.06	35.74	38.37

(*a*) Includes $83,000 and $92,000 for the Northern Territory and Australian Capital Territory respectively.

Farm stocks of hay

Particulars of stocks of hay held on farms at 31 March for the years 1964 to 1968 are given in the table below.

STOCKS OF HAY HELD ON FARMS, STATES AND A.C.T., 1964 TO 1968

(Tons)

31 March—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*A.C.T.*	*Aust.* (*a*)
1964 . .	1,610,063	1,911,475	179,422	547,354	274,812	276,650	5,085	4,804,861
1965 . .	1,586,969	2,402,299	145,737	614,451	275,948	414,415	7,606	5,447,425
1966 . .	1,158,481	1,915,693	190,659	444,089	291,528	296,196	5,171	4,301,817
1967 . .	1,888,668	2,175,731	270,470	544,676	249,531	399,891	8,151	5,537,118
1968 . .	1,273,385	1,104,034	241,922	267,677	223,115	297,118	3,594	3,410,845

(*a*) Excludes the Northern Territory, for which particulars are not available.

Under normal conditions, hay, whether whole or in the form of chaff, is somewhat bulky for overseas trade, and consequently does not figure largely among Australian exports. During 1967–68 exports amounting to 4,777 tons, valued at $235,000, were made, principally to Kuwait, Singapore and Malaysia. Imports of hay are not recorded separately, but are considered to be negligible.

Green fodder

Considerable areas are devoted to the growing of green fodder, usually as an adjunct to cereal operations or as a minor crop in irrigation areas. The areas recorded in respect of green fodder include areas of crops cut for feeding to livestock as green fodder or ensilage, together with areas fed off to stock as green forage. Statistics of green fodder exclude areas which may have been sown with the intention of harvesting for grain, but which, owing to adverse conditions, showed no promise of producing grain or even hay and were fed off to livestock. The principal crops cut for green fodder are lucerne and oats, while small quantities of barley, sorghum, wheat, maize, rye, and sugar cane are also used in this way. In 1967–68 the area under green fodder (5,916,141 acres) consisted of oats (2,466,456 acres), lucerne (2,346,498 acres), barley (233,245 acres), sorghum (228,217 acres), wheat (177,478 acres), rye (25,599 acres), maize (22,874 acres), sugar cane (1,070 acres), and other crops (414,704 acres). Particulars concerning the area of green fodder in the several States during each of the years 1963–64 to 1967–68 are given in the following table.

GREEN FODDER: AREA, STATES AND TERRITORIES, 1963–64 TO 1967–68

('000 acres)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1963–64 . .	1,974	431	1,011	972	418	71	..	1	4,877
1964–65 . .	2,397	454	1,111	1,135	446	67	1	1	5,614
1965–66 . .	1,952	526	1,143	1,210	414	78	1	1	5,324
1966–67 . .	2,133	443	1,179	1,169	399	74	..	1	5,399
1967–68 . .	2,326	545	1,337	1,217	414	75	..	1	5,916

In the 1967–68 season green fodder ranked second to wheat in area of crops throughout Australia. A graph showing the area sown to green fodder appears on plate 40. The value of these crops is variously estimated in the several States, but the Australian total, excluding Western Australia, may be taken as approximately $25,000,000 for the 1966–67 season and $29,000,000 for the 1967–68 season.

Ensilage

Ensilage is produced from herbage compacted tightly to exclude air and kept from contact with air and extraneous moisture to avoid moulding. Fermentation results in a dark mass of high protein and lactic acid content. Molasses may be added to hasten fermentation. Ensilage may be stored in pits or stacks or in constructed silos.

The several State Governments devote a considerable amount of attention to the education of the farming community with regard to the value of ensilage. Monetary aid is afforded in the erection of silos, and expert advice is supplied in connection with the design of the silos and the cutting and packing of the ensilage. Information regarding production and farm stocks of ensilage for the years 1963–64 to 1967–68 is given in the following table.

ENSILAGE: PRODUCTION AND FARM STOCKS, STATES AND A.C.T. 1963–64 TO 1967–68

(Tons)

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*A.C.T.*	*Aust.*
Production during—								
1963–64 season .	222,126	252,837	53,160	88,183	37,238	43,760	270	697,574
1964–65 „ .	182,063	250,997	34,440	78,709	26,798	54,438	400	627,845
1965–66 „ .	139,438	228,439	42,886	48,388	30,225	52,802	120	542,298
1966–67 „ .	312,968	335,244	31,895	65,548	29,135	87,041	406	862,237
1967–68 „ .	134,408	160,771	36,238	22,388	30,322	66,602	40	450,769
Farm stocks at—								
31 March 1964 .	565,457	185,115	139,691	78,997	29,709	43,554	1,108	1,043,631
„ „ 1965 .	534,730	206,304	112,596	86,093	24,160	49,668	892	1,014,443
„ „ 1966 .	365,995	157,134	73,122	58,038	28,293	43,461	291	726,334
„ „ 1967 .	519,371	233,979	77,180	62,262	20,476	68,464	740	982,472
„ „ 1968 .	365,488	82,139	79,461	24,749	21,460	54,118	4	627,419

Sugar cane

The growing of sugar cane is restricted to those coastal areas in Queensland and northern New South Wales which have suitable climatic and soil conditions.

The Bureau of Sugar Experiment Stations in Queensland and the Colonial Sugar Refining Company Limited render useful service to the sugar industry by advocating and demonstrating better methods of cultivation and the more scientific use of fertilisers, lime, etc. and by producing and distributing improved varieties of cane. In common with these two organisations, Sugar Research Ltd, of Mackay, undertakes technological research in raw sugar milling practices.

Sugar agreements and marketing arrangements in Australia

In Year Book No. 37, pages 940–1, a summary is given of the agreement operating between the Commonwealth and Queensland Governments in respect of the sugar industry in Australia. Briefly, the agreement places an embargo on sugar importations and fixes the price of sugar consumed in Australia. The current agreement was for the period from 1 September 1961 to 31 August 1967. It was extended until 30 June 1969 by supplementary agreements which prescribed prices for sugar equivalent to a retail price of 10.5 cents per lb.

Production of sugar is regulated under the terms of the agreement. At the mill level control is exerted by means of seasonal 'mill peaks' in respect of Queensland mills and a proportionate allowance for New South Wales mills. The combined total equals the estimated requirements of the domestic and export markets. Farm production is regulated according to the limit on the mill which the farm supplies. Exports are limited by the export quota provisions of the International Sugar Agreement (*see* below).

The Queensland Government acquires the whole of the sugar production of that State and of New South Wales by legislation and private agreement respectively. The net proceeds of all sugar sold are pooled and uniform prices paid to mills. Production for 1968–69 is estimated to be 2,724,000 tons 94 net titre, to which New South Wales is expected to contribute approximately 121,000 tons.

International Sugar Agreement

The International Sugar Agreement of 1937 was superseded by the International Sugar Agreements of 1953, 1958 and 1968. Details of the 1937, 1953 and 1958 Agreements were given in Year Books No. 40, pages 881–2, No. 48, page 936 and No. 54, page 892 respectively.

The 1968 International Sugar Agreement came into force on 1 January 1969. The Agreement is for a five year period, but the operation of the Agreement is to be reviewed before the end of the third year. It is possible that such a review will result in modifications to the Agreement to apply in its final two years.

Like its predecessors, the 1968 Agreement is built around a schedule of export quotas governing the net exports of exporting members to the world 'free' market. The Agreement is designed to maintain a balance between total world free market supply and demand by adjustments to the level of quotas in effect of exporting members. Quotas in effect cannot be adjusted downwards below 90 per cent of basic export tonnages except in exceptional circumstances where adjustments down to 85 per cent may be possible.

Quota adjustments under the Agreement must take account of the prices ruling in the world free market. The quota adjustment provisions pivot around a world free market price of four U.S. cents per pound f.o.b. and stowed Caribbean port, in bulk. When the price is below four cents, the system is designed to provide an upward pressure on prices by quota reductions. When the price is above four cents, the system is designed to apply a downward pressure on prices by increases in the level of quotas in effect above basic export tonnages.

Under the Agreement, exporters are required to establish and maintain certain levels of minimum stocks which are only to be released to the market when the price rises above 4.75 cents. If the price rises above 5.25 cents all quota restraints become inoperative and, if the price rises above 6.50 cents, exporters are required to supply importer members with certain quantities of sugar at prices not exceeding the commercial equivalent of 6.50 cents.

If the price is below 3.50 cents, minimum export quotas in effect are to apply, while at prices below 3.25 cents, members are obliged to prohibit imports from non-member countries.

Australia has a quota under this Agreement of 1,100,000 metric tons raw value (about 1,040,000 long tons of actual raw sugar) and is obliged to establish a minimum level of uncommitted stocks amounting to 15 per cent of this quantity.

Australian exports of negotiated price sugar to the United Kingdom under the British Commonwealth Sugar Agreement, and to the U.S.A. market, are not controlled by the International Sugar Agreement.

British Commonwealth Sugar Agreement

On 1 January 1953 the British Commonwealth Sugar Agreement became effective. The Agreement is now of indefinite duration but is subject to triennial review, with the next such review to be held in

1971. Under the Agreement Australia has a negotiated price quota of 335,000 tons per annum to the United Kingdom. The negotiated price for the years 1966, 1967 and 1968 of £stg43.10s. per ton of bulk raw sugar, f.o.b. and stowed, has been extended for the three years to 1971.

The Agreement also allows an adjusted overall Agreement quota (which includes the negotiated price quota) of 630,000 tons per annum to Australia. The balance of this quota over the negotiated price quota may be sold to preferential markets on the basis of the world market price plus preference, as part of Australia's export quota under the International Sugar Agreement.

Exports to the United States of America

Australian exports to the U.S.A. are governed by legislation enacted by the U.S.A. in 1965 and covering the period to the end of 1971. These exports are sold on the U.S. domestic raw sugar market, the supplies to which are regulated with a view to ensuring stable and equitable prices, independently of prices ruling elsewhere in the world.

Australian export entitlements to this market vary from year to year but have recently been of the order of 175,000 tons of raw sugar per year.

Fruit Industry Sugar Concession Committee and sugar rebates

The Fruit Industry Sugar Concession Committee was established by agreement between the Commonwealth and Queensland Governments and administers a fund contributed by the Queensland Government on behalf of the sugar industry.

Until 15 May 1960 a rebate of $4.40 a ton of refined sugar used in processing approved fruit products was paid to Australian manufacturers, provided they bought fresh fruit at prices not lower than those declared by the Committee as reasonable. This was increased to $10 a ton from 16 May 1960.

An export sugar rebate is also paid by the Committee to exporters of approved fruit products to ensure that manufacturers do not pay higher prices for the Australian sugar content than the price for which the cheapest imported sugar could be landed duty free in Australia. The Queensland Government is responsible for payment of a similar rebate to exporters of other approved products. Payment of the export sugar rebate in respect of approved fruit products has been made conditional upon satisfactory arrangements having been made for payment for such fruit at not less than the prices (if any) which the Committee has declared to be reasonable.

Under the Sugar Agreement 1962 the Queensland Government contributes to the fund $528,000 annually, reimburses the Committee for the actual expenditure on export sugar rebates, and, by a supplementary agreement operating from 1 September 1962, pays the Committee an additional sum equal to the amount payable by way of domestic sugar rebate in respect of the products exported. Any money remaining in the fund after the payment of rebates and administrative expenses may be used by the Committee for the promotion of the use and sale of fruit products, or for research for the purpose of increasing the yield per acre of Australian fruit, or of obtaining information regarding Australian fresh marketable fruits.

Financial assistance to the sugar industry

Under the provisions of the *Sugar Marketing Assistance Agreement Act* 1967 the Commonwealth Government arranged a repayable grant of $19 million, plus interest on a temporary advance of this amount from the Reserve Bank, to assist the returns from No. 1 Pool in the 1966 season, and $3,559,193 for a similar purpose in respect of the 1967 season. The total amount of $23,327,590 so advanced will be repayable over ten years commencing in mid-1970, and will not be subject to interest before then. Thereafter it will incur interest at the medium term bond rate prevailing when each grant was made.

Bulk handling of sugar

Bulk handling and mechanised loading and unloading of raw sugar is now in operation throughout the Australian sugar industry, except for the operation of a bagging station specially provided at Townsville to meet the needs of a few overseas customers. Terminals for the bulk loading of sugar were opened at Mackay in 1957, at Lucinda and Bundaberg in 1958, at Townsville in 1959, at Mourilyan in 1960, and at Cairns in 1964. A second storage shed at Bundaberg, a third shed at Mackay and second sheds at Lucinda and Townsville have been opened subsequently. The comparatively small New South Wales sugar industry was converted to bulk handling in 1954. Bulk receiving facilities are in operation at all Australian refineries.

Area of sugar cane

A brief outline of the development of the industry was included in earlier issues of the Year Book (*see* No. 38, page 985). The area of sugar cane in Australia for the seasons 1963–64 to 1967–68 and the averages for the three-year periods ended 1938–39, 1948–49 and 1958–59 are shown in the following table. The areas shown in the table do not include the small acreage cut for green fodder, which in 1967–68 amounted to 1,070 acres. The whole area planted is not cut for crushing during any one season, there being always a considerable amount of young and 'stand-over' cane as well as a small quantity required for plants.

SUGAR CANE: AREA(*a*), STATES, 1936-37 TO 1967-68

(Acres)

Period	New South Wales			Queensland			Australia			
	Area crushed	*Area of standover and newly-planted cane*	*Area cut for plants*	*Area crushed*	*Area of standover and newly-planted cane*	*Area cut for plants*	*Area crushed*	*Area of standover and newly-planted cane*	*Area cut for plants*	*Total*
Average for three years ended—										
1938–39 .	10,468	10,366	n.a.	247,632	89,690	n.a.	258,100	100,056	n.a.	n.a.
1948–49 .	7,687	8,666	338	230,905	90,448	12,891	238,592	99,114	13,229	350,935
1958–59 .	11,094	9,462	619	360,709	110,786	12,596	371,803	120,248	13,215	505,266
Year—										
1963–64 .	15,508	14,204	594	402,060	93,149	13,205	417,568	107,353	13,799	538,720
1964–65 .	19,429	17,043	728	450,956	126,906	12,896	470,385	143,949	13,624	627,958
1965–66 .	15,824	23,350	668	487,375	105,361	14,243	503,199	128,711	14,911	646,821
1966–67 .	22,475	18,548	613	534,998	78,609	13,265	557,473	97,157	13,878	668,508
1967–68 .	22,181	18,761	488	530,828	89,494	13,194	553,009	108,255	13,682	674,946

(*a*) Excludes areas cut for green fodder and small area sown in Western Australia.

Production of cane and sugar

The production of sugar cane in 1967–68 was at the record level of 16,756,000 tons, which was 71,000 tons above the previous record production in 1966–67.

SUGAR CANE: PRODUCTION OF CANE AND RAW SUGAR, STATES, 1936-37 TO 1967-68

(Tons)

Period	New South Wales		Queensland		Australia	
	Cane	*Sugar*(*a*)	*Cane*	*Sugar*(*a*)	*Cane*	*Sugar*(*a*)
Average for three years ended—						
1938–39 . .	324,531	43,419	5,215,217	760,994	5,539,748	804,413
1948–49 . .	283,613	35,444	4,767,291	700,053	5,050,904	735,497
1958–59 . .	356,324	43,881	9,221,497	1,260,564	9,577,821	1,304,445
Year—						
1963–64 . .	617,402	75,980	11,500,672	1,648,273	12,118,074	1,724,253
1964–65 . .	784,126	95,195	14,286,350	1,854,883	15,070,476	1,950,078
1965–66 . .	609,320	69,989	13,545,719	1,883,364	14,155,039	1,953,353
1966–67 . .	1,171,441	139,967	15,513,449	2,202,809	16,684,890	2,342,776
1967–68 . .	1,038,507	120,583	15,717,789	2,213,810	16,756,296	2.334.393

(*a*) Raw sugar at 94 net titre.

Climatic conditions in New South Wales are such that the crop matures in from twenty to twenty-four months, whereas in Queensland a period of from twelve to sixteen months is sufficient. The average yields of cane and sugar per acre for the years 1963–64 to 1967–68 and for the three-year periods ended 1938–39, 1948–49 and 1958–59 are shown below. Allowance should be made in interpreting these figures for the disparity in maturing periods noted above.

SUGAR CANE AND SUGAR: YIELD PER ACRE, STATES, 1936-37 TO 1967-68

(Tons)

Period	New South Wales			Queensland			Australia		
	Cane per acre crushed	*Sugar per acre crushed*	*Cane to each ton of sugar*	*Cane per acre crushed*	*Sugar per acre crushed*	*Cane to each ton of sugar*	*Cane per acre crushed*	*Sugar per acre crushed*	*Cane to each ton of sugar*
Average for three years ended—									
1938–39 . .	31.00	4.15	7.47	21.06	3.07	6.85	21.46	3.12	6.89
1948–49 . .	36.90	4.61	8.00	20.65	3.03	6.81	21.17	3.08	6.87
1958–59 . .	32.12	3.96	8.12	25.57	3.49	7.32	25.76	3.52	7.34
Year—									
1963–64 . .	39.81	4.90	8.13	28.60	4.10	6.98	29.02	4.13	7.03
1964–65 . .	40.36	4.90	8.24	31.68	4.11	7.70	32.04	4.15	7.73
1965–66 . .	38.51	4.42	8.71	27.79	3.86	7.19	28.13	3.88	7.25
1966–67 . .	52.12	6.23	8.37	29.00	4.12	7.04	29.93	4.20	7.12
1967–68 . .	46.82	5.44	8.61	29.61	4.17	7.10	30.30	4.22	7.18

Production and utilisation of sugar

Details of the production and utilisation of sugar for the years 1963–64 to 1967–68 are shown below. Consumption is shown in terms of refined sugar, including that consumed in manufactured products.

SUGAR: PRODUCTION AND UTILISATION, AUSTRALIA, 1963-64 TO 1967-68

Year	Changes in stocks(a)	Production (raw)	Exports(b)	Miscellaneous uses(c)	Consumption in Australia(d)	
					Total	Per head
	'000 tons	'000 tons	'000 tons	'000 tons	'000 tons	lb
1963–64	− 64.8	1,648.7	1,156.0	20.9	536.7	108.7
1964–65	− 4.1	1,880.0	1,308.2	20.5	555.4	110.3
1965–66	+ 82.6	1,961.8	1,289.0	22.1	568.2	110.7
1966–67	− 36.5	2,222.1	1,674.6	20.8	563.2	107.7
1967–68	+170.4	2,393.9	1,634.8	20.8	567.9	106.7

(a) Includes allowance for estimated sugar content of imported foodstuffs. (b) Raw and refined, including ships' stores and sugar in exported foodstuffs. (c) Includes refining losses and quantities used in golden syrup and treacle. (d) Includes sugar content of manufactured products consumed.

The quantity of sugar recorded as used in factories in 1967–68 amounted to 377,132 tons compared with 372,394 tons in 1966–67 and 371,713 tons in 1965–66. Particulars of sugar used in establishments not classified as factories are not available, and consequently these quantities are deficient to that extent. In 1967–68 the reported consumption by factories engaged in the production of jams, jellies and preserved and dried fruit and vegetables amounted to 77,288 tons, by those producing confectionery, ice cream, etc., to 74,196 tons, by breweries to 47,438 tons, and by factories producing aerated waters, cordials, etc., to 70,775 tons.

Sugar by-products

Industrial chemicals, together with large quantities of molasses, are produced as by-products in sugar mills. Further, during the period 1939 to 1960 building boards were made from the residue of crushed fibre after removal of the sugar content from sugar cane. These boards possessed high insulating and sound absorbing properties which made them particularly suitable for use in walls and ceilings. Early in the period referred to, the boards were manufactured almost entirely from crushed fibre residue, the remaining component being non-millable pine, but gradually the pine content was increased until by 1960 fibre residue was no longer being used. The main purpose for which crushed cane fibre residue is now used is furnace fuel in sugar mills.

Sugar prices and returns

The current prices of sugar in Australia (as determined under the Sugar Agreement in Australia, *see* page 858) and details of net returns for raw sugar from 1963–64 to 1966–67 are shown in the following tables.

SUGAR: PRICES IN AUSTRALIA

Year	Raw sugar, 94 net titre — Average return per ton received by millers and growers for— Home consumption	Exports (a)	Whole crop (a)	Refined sugar — Date of determination	Wholesale price to retailer per ton	Retail price capital cities per lb
	$	$	$		$	cents
1963 . .	122.00	131.22	127.97	16.5.60 to 18.6.67	180.52	9.2
1964 . .	120.75	83.89	95.78	19.6.67	206.72	10.5
1965 . .	121.95	67.27	85.14			
1966 . .	121.25	57.47	75.01			
1967(b) . .	142.80	59.45	82.05			

(a) Includes 'excess' sugar. (b) Excludes repayable Commonwealth grant (*see* page 859).

RAW SUGAR(*a*): NET RETURNS, AUSTRALIA, 1963-64 TO 1967-68

(*Source:* The Queensland Sugar Board)

Year	*Proportion exported*	*Net value of exports per ton*	*Average price per ton for whole crop*	*Estimated value of crop*
	per cent	$	$	$'000
1963–64 . . .	64.70	131.22	127.97	220,520
1964–65 . . .	67.76	83.89	95.78	186,728
1965–66 . . .	67.31	67.27	85.14	166,270
1966–67 . . .	72.50	57.47	75.01	175,694
1967–68 . . .	72.89	59.45	82.05	191,471

(*a*) 94 net titre.

The estimated value of the raw sugar produced has been based upon details taken from the audited accounts of the Queensland Sugar Board. The values stated comprise the gross receipts from sales in Australia and overseas, less refining costs, freight, administrative charges, etc., and export charges. They include concessions to the fruit industry and other rebates which in 1967–68 amounted to $3,820,000, but exclude the repayable Commonwealth grants referred to earlier. The value thus obtained represents the net market value of all raw sugar sold, which, less the rebates, is divided between the growers and millers in the approximate proportions of 70 per cent and 30 per cent respectively.

Exports of sugar

RAW AND REFINED SUGAR: EXPORTS, AUSTRALIA, 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Quantity	tons	1,116,190	1,269,139	1,252,546	1,638,263	1,597,240
Value . . .	$'000 f.o.b.	156,513	112,683	93,925	99,535	97,582

Tobacco

Tobacco is a summer-growing annual which requires a temperate to tropical climate, adequate soil moisture and a frost-free period of approximately five months. In Australia almost all tobacco is grown under irrigation. Because of specialised requirements, commercial production is restricted mainly to river valleys where suitable light friable soil types are found. Grown in the three eastern States of Australia, the centres of production include Mareeba (northern Queensland), Bundaberg (central coastal Queensland), Beerwah (Glasshouse Mountains, Queensland), Texas (south-western Queensland), Ashford (north-western New South Wales), Myrtleford (north-eastern Victoria), and Gunbower (northern Victoria). A small quantity of burley tobacco is produced, but most of the tobacco grown in Australia is of the flue-cured type. The main flue-cured variety is Hicks.

Marketing

Between 9 May 1941 and 24 September 1948 all leaf was under the direct control of the Australian Tobacco Board, and prices were paid on leaf appraisal. Subsequently the Board was disbanded, and sales have been by open auction through the Tobacco Leaf Marketing Board (Queensland and northern New South Wales) and the Victorian Tobacco Growers Association Ltd (southern New South Wales and Victoria). In 1964 the Victorian Tobacco Leaf Marketing Board was set up to market the portion of the crop that was formerly sold by the Victorian Tobacco Growers Association Ltd, and in 1965 a Board was established in New South Wales. However, the actual physical handling of New South Wales leaf at auction is carried out by the Queensland and Victorian authorities.

In 1965 the Commonwealth and State Governments agreed to a stabilisation plan for the tobacco growing industry with an annual marketing quota of 26 million pounds (green weight) of leaf to be sold under an agreed grade and price schedule providing for an average minimum price, based on normal crop fall-out. The overall marketing quota is divided among tobacco-producing States according to a formula approved by the Australian Agricultural Council. The determination of quotas for underdeveloped growers from State allocations is the responsibility of State Quota Committees.

In 1968, the final year of the plan, the Governments concerned agreed that it should continue for a further period of five years with an increased marketing quota for the 1969 selling season of 28.5 million pounds. Provision was made for an annual review of the quota and in 1969 it was set at 31 million pounds for the 1970 selling season, to be divided among the producing States in the same proportions as the original quota.

The plan is administered by the Australian Tobacco Board, constituted under the *Tobacco Marketing Act* 1965–66 and representative of the Commonwealth, tobacco-producing States, growers, and manufacturers.

The guaranteed average minimum price for the 1969 season remained at 109.0 cents per lb, the amount set for the 1968 season.

Central Tobacco Advisory Committee

The Australian Agricultural Council formed the Standing Advisory Committee on Tobacco during 1950. This Committee consisted of representatives of tobacco growers, tobacco manufacturers and the Commonwealth and State Governments. Its main functions were to review the industry and make recommendations on its problems. The Committee was reconstituted by the Agricultural Council during 1952–53.

In 1955 the Committee formulated a programme for increased research and advisory activities. The capital costs of establishing this programme were estimated at $336,000, of which the Commonwealth Government and tobacco manufacturers each agreed to contribute half. Annual contributions are made to a fund by the Commonwealth and State Governments and tobacco growers and manufacturers. A Tobacco Industry Trust Account has been established under the *Tobacco Industry Act* 1955–1965 to receive these contributions. The contributions from growers and manufacturers are obtained under the Tobacco Charges Assessment Act and the Tobacco Charge Acts, whose purpose is to provide funds to be used in research and otherwise with a view to fostering and expanding the Australian tobacco industry. This programme commenced in 1956, and since then $5,281,457 has been paid to State and Commonwealth departments for expenditure on tobacco research and extension. The allocation for 1968–69 was $794,100. As from 1 July 1964 the annual Commonwealth contribution has been increased to one-half of approved expenditure from the Tobacco Industry Trust Account. In 1961 a Research Sub-Committee was established to review annually scientific programmes and finance in relation to the Tobacco Industry Trust Account and make recommendations to the Central Tobacco Advisory Committee. However, following the establishment of the Australian Tobacco Board, the Australian Agricultural Council in 1966 abolished this sub-committee and reconstituted the Central Tobacco Advisory Committee with the following terms of reference:

> 'To make recommendations annually to the Australian Agricultural Council, through the Standing Committee on Agriculture, regarding research and extension programmes to be financed from the Tobacco Industry Trust Account.'

Tobacco research and extension

Details of the recommendations by the Tobacco Inquiry Committee and grants periodically approved by the Commonwealth Government up to 30 June 1953 are given in Year Book No. 40, pages 895–6, and in previous issues.

The Commonwealth Scientific and Industrial Research Organization and the State Departments of Agriculture in the tobacco growing States are carrying out investigations into a wide range of problems involving fundamental research, plant breeding, variety trials, irrigation, disease and pest control, fertilisers, crop rotation, and cultural practices. The State Departments also provide extension services for tobacco growers.

Tobacco factories

Manufacturers of Australian cigarettes and tobacco are granted a lower rate of duty on imported tobacco leaf, provided it is blended with a prescribed minimum percentage of Australian leaf. These percentages, which in November 1946 stood at 3 per cent for cigarettes and 5 per cent for tobacco, have been increased progressively in intervening years and since 1 January 1966 have been set at 50 per cent for both cigarettes and tobacco.

In 1967–68 the quantity of cured leaf recorded as used in tobacco factories in Australia amounted to 50 million lb, of which 23 million lb was of local origin. The balance was imported, chiefly from the United States of America and South Africa.

Tobacco area and production

The area of tobacco in 1967–68 was 21.8 per cent below the record area established in 1962–63. Production at 24,721,000 lb was 28.0 per cent below the record established in 1963–64.

TOBACCO: AREA AND PRODUCTION, STATES, 1936-37 TO 1967-68

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
AREA (ACRES)							
Average for three years ended—							
1938–39	697	4,262	3,842	77	1,055	134	10,067
1948–49	415	1,046	1,948	..	609	..	4,018
1958–59	1,257	3,478	7,479	..	1,295	..	13,509
Year—							
1963–64	2,927	10,519	15,579	..	..	..	29,025
1964–65	2,546	9,720	14,042	..	..	..	26,308
1965–66	1,742	9,230	12,509	..	..	..	23,481
1966–67	1,794	8,455	12,134	..	..	..	22,383
1967–68	1,831	8,664	12,472	..	..	..	22,967
PRODUCTION OF DRIED LEAF ('000 lb)							
Average for three years ended—							
1938–39	471	1,603	2,173	17	741	104	5,109
1948–49	380	670	1,725	..	523	..	3,298
1958–59	1,066	3,770	5,563	..	1,016	..	11,415
Year—							
1963–64	2,652	14,459	17,231	..	..	..	34,342
1964–65	2,356	12,080	10,675	..	..	..	25,111
1965–66	1,698	11,083	14,580	..	..	..	27,361
1966–67	2,133	10,953	14,819	..	..	..	27,905
1967–68	2,075	7,625	15,021	..	..	..	24,721

Imports and exports of tobacco

Imports of tobacco and tobacco manufactures into Australia during 1967–68 were valued at $22.5 million. This included 20.8 million lb of unmanufactured tobacco valued at $15.3 million. Exports of tobacco and tobacco manufactures during 1967–68 were valued at $2,623,000, including Australian produce, $1,994,000.

Cotton

This annual shrub requires a hot climate and inter-row weed control. Lint (long fibres) is extracted from the seed cotton in the ginneries and is used for yarn. The residue, consisting of linters (short fibres), kernels and hulls (outer seed coat), is treated in oil mills. Linters are used in the manufacture of felts and other materials where fibre length is of little importance. The kernels when crushed produce an oil which is used for both edible and industrial purposes. The residual meal is a useful high protein stockfeed; the hulls may be used as fuel.

Until 1964 cotton growing was mainly confined to Queensland, most of it being grown under conditions of natural rainfall. Since then there has been an increasing trend in the use of irrigation. A sound industry has been established in the Namoi Valley in New South Wales with water provided by the Keepit Dam. More than three quarters of Australia's raw cotton requirements are now produced in that area. Cotton is also grown under irrigation in Queensland and on the Ord River of Western Australia and to a lesser extent in the Murrumbidgee Irrigation Areas of New South Wales. Nearly all Australian cotton is now grown with the assistance of irrigation and acreage yields compare more than favourably with those obtained by traditional overseas cotton producing countries.

Cotton bounty

For particulars of the *Cotton Bounty Act* 1951–1958, *see* page 1044 of Year Book No. 49. This Act was replaced by the *Raw Cotton Bounty Act* 1963–1966 under which the Commonwealth agreed to pay a bounty on raw cotton produced and sold for use in Australia at the rate of 13.4375 cents per lb for Middling 1″ White, with premiums and discounts on grades and staples above and below, up to a maximum of $4 million in any one year, for a period of five years from 1 January 1964. In 1968 this Act was amended to extend bounty payments to all cotton produced in Australia of a grade higher than Strict Good Ordinary, whether used in Australia or not, provided it has a staple length of ⅞″ or greater. The Commonwealth Government proposes to phase out the bounty assistance over the next three years, commencing with the 1969 crop. That year the maximum bounty will remain at the previous level of $4 million, falling to $3 million in 1970, and to $2 million in 1971 after which it will cease.

Cotton area and production

COTTON: AREA, PRODUCTION AND YIELD PER ACRE, STATES AND TERRITORIES 1963-64 TO 1967-68

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
				AREA (ACRES)					
1963–64	10,947	..	28,465	..	1,526	..	..	..	40,938
1964–65	18,897	(*a*)	13,550	..	5,475	..	..	..	(*b*)37,922
1965–66	33,176	(*a*)	13,455	..	8,307	..	..	..	(*b*)54,938
1966–67	30,104	..	11,167	..	11,892	..	..	..	53,163
1967–68	53,474	..	11,629	..	11,782	..	..	..	76,885
				PRODUCTION (UNGINNED) ('000 lb)					
1963–64	8,167	..	7,943	..	2,114	..	..	..	18,223
1964–65	45,951	(*a*)	6,268	..	10,790	..	..	..	(*b*)63,009
1965–66	103,280	(*a*)	10,138	..	20,431	..	..	..	(*b*)133,850
1966–67	79,159	..	11,800	..	29,400	..	..	..	120,360
1967–68	170,064	..	18,718	..	25,954	..	..	..	214,736
				YIELD PER ACRE (lb)					
1963–64	746	..	279	..	1,385	..	..	..	445
1964–65	2,432	(*a*)	463	..	1,971	..	..	..	(*b*)1,662
1965–66	3,113	(*a*)	754	..	2,460	..	..	..	(*b*)2,436
1966–67	2,630	..	1,057	..	2,472	..	..	..	2,264
1967–68	3,180	..	1,610	..	2,203	..	..	..	2,793

(*a*) Not available for publication. (*b*) Incomplete; *see* individual States.

NOTE. Production in Queensland relates to the crop harvested in the first of the years mentioned, and in other States to the year following: e.g., for 1967–68, the Queensland crop was harvested during 1967, while the crop in other States was harvested during 1968.

Production of ginned cotton for 1963–64 was 6.570,000 lb; 1964–65, 17,286,000 lb; 1965–66, 40,885,000 lb; 1966–67, 35,510,000 lb; and 1967–68, 70,405,000 lb.

The gross value of unginned cotton for the five years ended 1967–68 was $2,212,000; $7,685,000; $14,323,000; $12,468,000; and $19,675,000 respectively.

Imports of raw cotton (excluding linters) during the past five years were: 1963–64, 56,663,000 lb; 1964–65, 55,474,000 lb; 1965–66, 32,096,000 lb; 1966–67, 19,963,000 lb; and 1967–68, 27,066,000 lb.

Small quantities of Australian raw cotton have been exported since 1966–67, when 3,280,000 lb was sent overseas. The quantity exported in 1967–68 was 1,746,000 lb. Japan is the main importing country.

Peanuts

Peanuts, or groundnuts, are a sub-tropical legume (and hence summer growers), the pods of which mature beneath the surface of the soil. They thus require well drained, light textured soils. At harvest the plant is pulled, wind-rowed, field-cured for two to four weeks, and then threshed to recover the pods. The main products of the industry are nuts, peanut oil, oil cake, and synthetic protein fibre.

The production of peanuts in Australia is confined mainly to Queensland, although small quantities are grown in New South Wales, the Northern Territory and, in some years, Western Australia.

PEANUTS: AREA AND PRODUCTION, STATES, 1963-64 TO 1967-68

	Area (acres)			*Production (cwt)*		
Year	*N.S.W.*	*Qld*	*Aust.*	*N.S.W.*	*Qld*	*Aust.*
1963–64 . . .	478	44,482	(*a*)44,960	4,744	455,982	(*a*)460,726
1964–65 . . .	400	45,554	(*a*)45,954	4,746	202,369	(*a*)207,115
1965–66 . . .	394	57,298	57,708	4,468	543,735	548,279
1966–67 . . .	397	69,330	(*a*)69,727	5,194	821,957	(*a*)827,151
1967–68 . . .	353	61,373	61,738	3,920	602,207	606,159

(*a*) Incomplete: excludes Northern Territory.

The gross value of the 1967–68 crop was $6,136,000 which was approximately $1,830,000 less than in 1966–67. Total supplies available for consumption in Australia in 1967–68 were 23,290 tons (in shell equivalent), after allowing for a decrease of 3,262 tons in stock held by the Peanut Marketing Board, exports of 574 tons of peanut and peanut products, and industrial usage of 11,760 tons. Supplies were made up of 30,247 tons from Australian production received into store by the Board and 2,115 tons imported.

Flax

Prior to 1948–49 flax for the production of linseed oil had not been grown extensively in Australia. Since then, however, action has been taken to develop this industry, the ultimate objective being the production of sufficient linseed to meet Australia's total oil requirements. The main producing areas are the Darling Downs in Queensland, the wheat belt of New South Wales, and the western and north-eastern districts of Victoria. In recent years there has been increased production, principally for export, in the Esperance district of Western Australia.

Particulars of area and production of flax for linseed, by States, are given in the following table for the years 1963–64 to 1967–68.

FLAX FOR LINSEED: AREA AND PRODUCTION, STATES, 1963-64 TO 1967-68

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Aust.*
Area (acres)—						
1963–64	15,335	16,240	83,336	1,002	1,588	117,501
1964–65	23,769	9,953	97,092	898	2,135	133,847
1965–66	3,658	7,370	12,266	1,196	97	24,587
1966–67	9,580	5,012	17,854	389	1,751	34,586
1967–68	9,947	9,365	27,764	516	6,886	54,478
Production (tons of linseed)—						
1963–64	3,722	4,758	20,342	283	411	29,516
1964–65	8,761	2,671	34,175	426	567	46,600
1965–66	213	2,538	2,895	403	15	6,064
1966–67	3,265	2,319	7,338	188	634	13,744
1967–68	952	804	6,571	72	2,083	10,482

Hops

Hops are grown from perennial rootstocks over deep, well-drained soils in localities sheltered from the wind. The hop-bearing vine shoots are carried upon wire and coir trellises, from which they are later harvested, principally by hand. The green hops are kiln-dried and bleached with sulphur dioxide fumes, following which the cured hops are pressed into bales.

Hop growing in Australia is confined to the Derwent, Huon and Channel areas of Tasmania and the Ovens and King Valleys in Victoria. A small area is also under hops in Western Australia, near Manjimup, but the details are not available for publication.

Production and imports of hops

The production of hops in Australia is insufficient to meet local requirements, and additional supplies are imported to meet the needs of the brewing industry. In the following table details of the production and imports of hops and the quantity of hops used in breweries are shown for each of the years 1963–64 to 1967–68. Exports of hops are negligible and are not recorded separately.

HOPS: PRODUCTION AND DISPOSAL, AUSTRALIA
1963-64 TO 1967-68

Year	*Production(a)*		*Imports*	*Net available supplies (b)*	*Quantity used in breweries*
	Quantity	*Gross value*			
	cwt	$'000	cwt	cwt	cwt
1963–64	19,858	1,534	536	20,394	37,033
1964–65	27,892	2,372	9,521	37,413	39,517
1965–66	36,463	3,020	12,696	49,159	35,223
1966–67	28,907	2,531	2,683	31,590	31,347
1967–68	36,752	3,211	1,370	38,122	30,634

(*a*) Excludes production in Western Australia, for which details are not available for publication.
(*b*) Disregards movements in stocks.

Safflower

The cultivation of safflower in Australia has developed rapidly in recent years to make it one of the major oilseed crops. It is best cultivated either in the warm temperate zones or as a winter crop in the tropical or sub-tropical regions, on moderately fertile, weed-free, clay or sandy loams. Adequate moisture is required up to the flowering stage, after which it is relatively drought resistant. The soil preparation and sowing techniques are similar to those employed for small grains; it is usually harvested by combine when the seed is hard and dry. The oil, produced by crushing, is used in the manufacture of margarine, soaps, paints, varnishes, enamels, and textiles.

Queensland is the main producer of safflower where suitable growing conditions exist particularly in the marginal wheat regions of Dawson-Callide Valleys, Fitzroy Basin, Central Highlands, and the Darling Downs. Suitable growing conditions also exist in New South Wales, Victoria and Western Australia, but, at present, production in the latter two States is relatively small.

SAFFLOWER: AREA AND PRODUCTION, STATES AND TERRITORIES
1963-64 TO 1967-68

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust. (a)*
				AREA (ACRES)					
1963–64	113	(*b*)	18,141	..	1,125	..	..	..	19,379
1964–65	2,253	1,902	43,350	(*b*)	4	..	..	..	47,509
1965–66	2,539	935	56,727	(*b*)	75	..	..	..	60,276
1966–67	5,092	729	88,803	(*b*)	(*b*)	..	..	..	94,624
1967–68	8,550	489	95,351	(*b*)	225	..	..	..	104,615
				PRODUCTION (BUSHELS)(*c*)					
1963–64	1,546	(*b*)	275,106	..	26,387	..	..	..	303,039
1964–65	33,373	20,218	643,524	(*b*)	280	..	..	..	697,395
1965–66	13,941	11,738	522,810	(*b*)	1,070	..	..	..	549,559
1966–67	71,823	7,336	1,290,087	(*b*)	(*b*)	..	..	..	1,369,246
1967–68	59,310	1,375	815,354	(*b*)	2,207	..	..	..	878,246

(*a*) Incomplete; *see* individual States. (*b*) Not available for publication. (*c*) 40 lb per bushel.

Imports of crude safflower seed oil in 1966–67 and 1967–68 totalled 1,267,000 gallons and 833,000 gallons respectively. These imports came mainly from the United States of America.

Vegetables for human consumption

Area, production and trade

Vegetables were initially grown on a large scale near the main cities, where there was ready access to reliable water supplies and to markets. Later, the expansion of irrigation areas and improvement in transport services resulted in their production being extended into many other areas. At present, because of the wide diversity of climatic conditions across Australia, supplies for main city markets are drawn from widely different areas, depending upon the times of maturity of the various crops. Apart from potatoes and onions, which are sold in some States through marketing boards, the bulk of vegetable trading takes place at the metropolitan markets of the cities concerned.

Details of the areas planted and production of individual kinds of vegetables are shown below for the seasons 1965–66 to 1967–68. Certain particulars shown are incomplete in that details for specific vegetables in some States are either not available or are not available for publication. For further information *see* the bulletin *Rural Industries*. Details of the estimated consumption of vegetables for a series of years ending 1967–68 are given in the chapter Miscellaneous.

FRESH VEGETABLES FOR HUMAN CONSUMPTION: AUSTRALIA
1965-66 TO 1967-68

	1965–66		*1966–67*		*1967–68*	
Vegetable	*Area sown*	*Production*	*Area sown*	*Production*	*Area sown*	*Production*
	acres	tons	acres	tons	acres	tons
Asparagus	3,976	5,957	4,227	5,776	4,315	7,427
Beans, French and runner	17,319	30,434	18,073	36,912	18,632	31,395
Beans, navy	3,400	242	5,153	933	6,045	1,445
Beetroot	2,081	17,248	2,558	22,426	2,428	22,138
Cabbages and brussel sprouts	5,916	69,134	6,193	76,151	5,948	69,001
Carrots	5,922	67,833	6,326	77,599	6,767	74,588
Cauliflowers	6,511	73,967	6,364	77,168	6,229	72,996
Celery	769	12,803	757	13,485	839	12,639
Cucumbers	1,913	8,710	1,987	8,870	2,197	10,280
Lettuce	4,976	23,303	5,046	24,324	5,399	24,639
Onions	8,250	58,124	10,210	84,465	9,852	58,486
Parsnips	1,336	13,966	1,278	15,163	1,302	13,806
Peas, blue	5,502	2,741	4,373	2,992	4,267	2,505
Peas, green	66,938	102,661	65,964	120,182	57,428	92,191
Potatoes	96,311	639,000	99,328	642,967	105,668	658,112
Tomatoes	16,705	159,707	17,791	172,965	17,266	153,309
Turnips, swede and white	1,893	8,373	1,655	8,834	1,727	8,493
All other	39,661	..	36,339	..	36,809	..
Total	**289,378**	..	**293,621**	..	**293,118**	..

Processed vegetables

Total production of canned vegetables in 1967–68 amounted to 182,051,000 lb. The principal types produced were green peas (excluding mint-pro peas), 24,489,000 lb; green beans, 9,807,000 lb; baked beans (including pork and beans), 41,810,000 lb; asparagus, 11,750,000 lb; beetroot, 39,810,000 lb; and mushrooms, 8,142,000 lb.

The production of dehydrated vegetables, including split peas, during 1967–68 amounted to 10,494,000 lb, while the production of potato crisps, chips and flakes was 25,378,000 lb.

There has been rapid development in the quick-frozen vegetable industry. Data were collected for the first time in 1957–58, when 13,846,000 lb of frozen vegetables were produced, made up principally of 10,131,000 lb of peas and 2,540,000 lb of beans. In 1967–68 production had risen to 100,862,000 lb, of which 63,891,000 lb were peas and 21,595,000 lb were beans.

Exports and imports of vegetables

Overseas exports of fresh and frozen vegetables during 1967–68 amounted to 43,439,000 lb valued at $4,113,000; dried vegetables, 7,964,000 lb valued at $548,000; preserved vegetables, 4,413,000 lb valued at $816,000; and other prepared or preserved vegetables, 108,000 lb valued at $65,000

Imports of fresh and frozen vegetables during 1967–68 amounted to 13,487,000 lb valued at $1,424,000.

Potatoes

This crop requires deep friable soils, which in Australia are usually basaltic, alluvial or swampy in origin. Fertiliser requirements, which are generally high, vary with the type of soil. Potatoes are killed by heavy frost, but require only moderate temperatures for growth. Mechanical planters and diggers are used to a variable extent depending upon a variety of factors including terrain, state of the soil and scale of operations. Seed certification schemes, which operate in all States except Queensland, provide a supply of seed which is free from viral, fungal and bacterial diseases. In Australia potatoes are used almost entirely for human consumption and not for the production of starch or alcohol. They are rarely used as stock feed.

Area, production, and yield per acre. Victoria possesses particular advantages for the growing of potatoes, as the rainfall is generally satisfactory and the climate is unfavourable to the spread of Irish blight; consequently, the crop is widely grown. The principal areas of that State are the central highlands and the south-western and Gippsland districts. New South Wales and Queensland come next in order of acreage sown. In New South Wales production is chiefly in the tablelands district.

POTATOES: AREA, PRODUCTION AND YIELD PER ACRE, STATES AND TERRITORIES, 1936-37 TO 1967-68

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
AREA (ACRES)									
Average for three years ended—									
1938–39	21,049	40,376	11,551	4,445	4,627	32,044	..	59	114,151
1948–49	20,440	53,862	10,795	6,084	6,753	38,643	..	103	136,680
1958–59	16,589	45,225	12,980	6,035	7,977	19,002	4	94	107,906
Year—									
1963–64	24,352	39,626	15,886	5,459	5,835	10,806	(*a*)	23	(*b*)101,987
1964–65	20,530	32,931	14,005	5,247	5,797	9,393	(*a*)	16	(*b*)87,919
1965–66	21,913	34,333	16,080	5,748	6,229	11,993	1	14	96,311
1966–67	23,594	37,167	16,227	5,948	6,100	10,278	(*a*)	14	(*b*)99,328
1967–68	24,334	40,329	17,347	6,527	6,149	10,960	(*a*)	22	(*b*)105,668
PRODUCTION (TONS)									
Average for three years ended—									
1938–39	52,158	137,583	17,191	20,342	23,678	109,285	..	143	360,380
1948–49	62,701	191,590	26,470	32,149	38,722	148,389	..	598	500,619
1958–59	68,533	245,937	50,989	48,072	50,024	92,367	5	391	556,318
Year—									
1963–64	98,308	200,384	90,201	51,195	55,402	66,420	(*a*)	122	(*b*)562,032
1964–65	75,659	183,665	82,389	48,400	60,739	57,062	(*a*)	105	(*b*)508,019
1965–66	104,647	240,786	97,744	56,471	62,865	76,400	4	83	639,000
1966–67	126,183	225,186	93,738	60,271	64,169	73,300	(*a*)	120	(*b*)642,967
1967–68	122,795	215,941	106,429	63,331	70,469	79,058	(*a*)	89	(*b*)658,112
YIELD PER ACRE (TONS)									
Average for three years ended—									
1938–39	2.48	3.41	1.49	4.58	5.12	3.41	..	2.42	3.16
1948–49	3.07	3.56	2.45	5.28	5.73	3.84	..	5.81	3.66
1958–59	4.13	5.44	3.93	7.97	6.27	4.86	1.25	4.16	5.16
Year—									
1963–64	4.04	5.06	5.68	9.38	9.49	6.15	(*a*)	5.30	(*b*)5.51
1964–65	3.69	5.58	5.88	9.22	10.48	6.07	(*a*)	6.56	(*b*)5.78
1965–66	4.78	7.01	6.08	9.82	10.09	6.37	4.00	5.93	6.63
1966–67	5.35	6.06	5.78	10.13	10.52	7.13	(*a*)	8.57	(*b*)6.47
1967–68	5.05	5.35	6.14	9.70	11.46	7.21	(*a*)	4.05	(*b*)6.23

(*a*) Not available for publication. (*b*) Incomplete; excludes Northern Territory.

Potato marketing boards were established in all States except Tasmania under separate State legislation after Commonwealth control of potato marketing under war-time legislation ceased at the end of 1948. The life of the Queensland Board was not extended when its term ended in 1954. The New South Wales Board was voted out by growers in 1956, and the Victorian Board also ceased functioning in that year. The Boards in South Australia and Western Australia are the only statutory boards still in operation.

Value of potato crop. The estimated gross value of the potato crop of each State for the 1967–68 season and the value per acre are shown in the following table.

POTATOES: VALUE OF CROP, STATES, 1967-68

		N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.(a)*
Aggregate value	$'000	9,438	18,566	9,444	5,176	5,537	3,818	51,985
Value per acre	$	388	460	544	793	900	348	492

(*a*) Includes Northern Territory and Australian Capital Territory.

Consumption and exports of potatoes. The annual consumption of potatoes in Australia during each of the three years 1965–66 to 1967–68 amounted to 573,700 tons, 574,700 tons and 591,600 tons respectively or 111.7 lb, 109.9 lb and 111.1 lb respectively per head of population. These figures exclude the quantities used for seed, which averaged about 52,000 tons annually over this period. Details showing exports and imports for the years 1963–64 to 1967–68 are given in the following table.

POTATOES: EXPORTS AND IMPORTS, AUSTRALIA
1963-64 TO 1967-68

	Exports		*Imports*	
Year	*Quantity*	*Value*	*Quantity*	*Value*
	tons	$'000 f.o.b.	tons	$'000 f.o.b.
1963–64 . . .	12,722	643	. .	. .
1964–65 . . .	4,715	427	5,404	343
1965–66 . . .	10,064	626	7,208	455
1966–67 . . .	13,593	839	. .	. .
1967–68 . . .	8,150	693	. .	. .

Western Australia has emerged in recent years as the principal exporting State, accounting for nearly two-thirds of the Australian total in 1967–68. Australia's principal markets are Singapore, Papua and New Guinea and New Caledonia.

Onions

Area, production and yield per acre. Australia's onion supply comes chiefly from Victoria, Queensland and South Australia. The Victorian crop consists almost entirely of brown onions, and the bulk of the crop is grown in a small section of the Western Division of the State, where the volcanic ash soils have been found to be particularly suitable for onion growing on a commercial scale. Most of Queensland's onion production is grown in the Lockyer Valley and also consists mainly of brown varieties.

ONIONS: AREA, PRODUCTION AND YIELD PER ACRE, STATES
1936-37 TO 1967-68

Period	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Aust.(a)
AREA (ACRES)							
Average for three years ended—							
1938–39	126	5,634	1,187	521	122	8	7,604
1948–49	433	6,245	2,234	534	468	26	9,944
1958–59	491	4,614	3,655	635	413	29	9,846
Year—							
1963–64	682	3,756	3,317	930	446	91	9,222
1964–65	803	3,825	3,422	1,146	428	83	9,707
1965–66	999	2,955	2,748	1,148	331	69	8,250
1966–67	1,256	3,295	3,495	1,631	413	120	10,210
1967–68	1,116	3,617	2,951	1,682	340	146	9,852
PRODUCTION (TONS)							
Average for three years ended—							
1938–39	324	34,039	3,040	3,904	915	42	42,285
1948–49	1,703	41,156	10,489	5,032	3,831	153	62,388
1958–59	2,496	31,982	15,505	5,625	4,599	132	60,410
Year—							
1963–64	4,998	17,946	20,412	8,736	6,814	372	59,278
1964–65	6,378	22,963	22,853	11,061	5,981	465	69,701
1965–66	8,764	17,115	17,728	10,069	3,948	500	58,124
1966–67	10,809	22,375	27,033	17,933	5,417	898	84,465
1967–68	9,535	11,339	14,882	16,635	4,633	1,462	58,486
YIELD PER ACRE (TONS)							
Average for three years ended—							
1938–39	2.57	6.04	2.56	7.49	7.50	5.25	5.56
1948–49	3.93	6.59	4.70	9.42	8.19	5.88	6.27
1958–59	5.08	6.93	4.24	8.86	11.14	4.55	6.14
Year—							
1963–64	7.33	4.78	6.15	9.39	15.28	4.09	6.43
1964–65	7.94	6.00	6.68	9.65	13.97	5.60	7.18
1965–66	8.77	5.79	6.45	8.77	11.93	7.25	7.04
1966–67	8.61	6.79	7.73	11.00	13.12	7.48	8.27
1967–68	8.54	3.13	5.04	9.89	13.63	10.01	5.94

(a) Includes, for some of the years shown, the Northern Territory and the Australian Capital Territory.

Value of onion crop. The estimated gross value of the onion crop and the value per acre are shown in the following table for the 1967–68 season.

ONIONS: VALUE OF CROP, STATES, 1967-68

		N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Aust.
Aggregate value	$'000	802	1,427	2,325	1,888	541	184	7,167
Value per acre	$	719	395	788	1,122	1,591	1,260	727

Consumption and exports of onions. The consumption of onions in Australia during 1967–68 was 63,000 tons or 11.7 lb per head of population. Onions are the only root crop, other than potatoes, in which any considerable overseas trade is carried on by Australia. In 1967–68 exports amounted to

851 tons, valued at $152,000, and were shipped mainly to Papua and New Guinea and New Caledonia. The quantity of exports in 1966–67 was 8,816 tons, valued at $525,000. Imports of fresh onions amounted to 2,803 tons, valued at $300,000, in 1967–68, and 849 tons, valued at $95,000, in 1966–67. The principal country from which onions were imported was New Zealand.

Fruit

The varieties of fruit grown differ in various parts of the States, ranging from pineapples, papaws and mangoes in the tropics to strawberries, raspberries and currants in the colder parts of the temperate zone. In New South Wales citrus fruit (oranges, lemons, etc.) and bananas are the principal crops, although apples, peaches, plums, pears, and cherries are grown extensively. The principal varieties grown in Victoria are apples, pears, peaches, oranges, and apricots. In Queensland apples, pineapples, bananas, oranges, mandarins, peaches, and plums are the varieties most largely cultivated. In South Australia, in addition to oranges, apples, peaches, apricots, and pears, almonds and olives are grown extensively. In Western Australia apples, oranges, plums, and pears are the chief varieties. In Tasmania apples occupy over three-quarters of the fruit-growing area, but small fruit, such as currants, raspberries and gooseberries, is grown extensively, the balance of the area being mainly taken up with pears and apricots.

Overseas marketing of fruits

The *Apple and Pear Organization Act* 1938–1966 provides for the establishment of an Australian Apple and Pear Board comprising representatives of growers, exporters, employees, and the Commonwealth Government. A representative in London has also been appointed by the Board. An export levy to meet the expenses of the Board is provided for in the *Apple and Pear Export Charges Act* 1938–1968. The function of the Board is the organisation and control of exports of fresh apples and pears, and it has the power to regulate shipments, determine export quotas, allocate consignments from each State, and recommend the licensing of exporters. The Board contributes to apple and pear publicity activities overseas.

Since January 1964 the *Canned Fruits Marketing Act* 1963–1968 has replaced the *Canned Fruits Export Control Act* 1926–1959 under which the overseas marketing of canned fruit was initially organised (*see* Year Book No. 49, page 1050). The Australian Canned Fruits Board, which is constituted under the Act, determines the terms and conditions for overseas sales. The Board exercises this control through a system of export licences. The Board, whose membership was increased from five to eleven members and which was granted greater powers under the new Act, comprises representatives of the Commonwealth Government (one), canners of deciduous fruit (six), growers of deciduous fruit (three), and pineapple interests (one). The Board maintains a London office. The *Canned Fruits Export Charges Act* 1926–1966 provides for a levy on exports to meet the Board's expenses, which include contributions to overseas publicity connected with the canned fruit industry. In 1963 an excise duty was imposed by the *Canned Fruits Excise Act* 1963 on canned deciduous fruit entered for domestic consumption, and the proceeds of the duty are made available to the Board to assist in the promotion of overseas sales of canned deciduous fruit.

In 1959 the Australian Canned Fruit Sales Promotion Committee was established to promote the sale of canned deciduous fruit on the home market and overseas. The operations of the Committee are financed by a levy on fruit accepted by the canneries for the production of canned fruit. The Committee comprises representatives of growers and processers of canning fruit and a representative of the Commonwealth Government.

Area and production of fruit

In general the area under fruit in Australia has been increasing steadily during recent years.

FRUIT: AREA(*a*), STATES AND TERRITORIES, 1963-64 TO 1967-68

(Acres)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1963–64 .	98,670	76,796	44,681	41,686	25,670	22,134	149	54	309,840
1964–65 .	97,221	75,509	45,918	43,012	26,425	22,375	130	56	310,646
1965–66 .	97,212	75,001	47,715	43,986	26,715	22,426	110	42	313,207
1966–67 .	96,482	73,519	50,058	44,157	26,458	22,343	133	38	313,188
1967–68 .	95,798	71,158	51,391	45,113	25,598	21,762	98	37	310,955

(*a*) Bearing and not bearing.

FRUIT: AREA AND PRODUCTION, STATES AND TERRITORIES, 1967-68

Fruit	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
AREA, BEARING AND NOT BEARING (ACRES)									
Apples	18,692	21,074	13,438	5,900	15,078	18,378	..	31	92,591
Apricots	1,889	3,005	524	4,824	291	392	..	..	10,925
Bananas	19,993	..	5,887	..	518	..	(a)	..	(b)26,398
Cherries	2,806	2,118	11	601	45	55	..	..	5,636
Citrus—									
Oranges	27,958	6,285	3,451	17,458	4,635	..	43	..	59,830
Mandarins	2,638	648	2,594	1,014	628	..	1	..	7,523
Lemons and limes	2,804	1,018	366	729	557	..	3	..	5,477
Other	757	319	111	524	112	..	3	..	1,826
Nuts	194	180	871	4,412	72	..	36	..	5,765
Peaches	8,091	13,783	1,741	5,182	894	44	..	..	29,735
Pears	3,036	17,060	1,171	1,942	1,018	1,400	..	..	25,627
Pineapples	196	..	15,354	..	..	..	(a)	..	(b)15,550
Plums	1,801	1,412	1,517	848	1,122	47	..	..	10,026
Prunes	3,110	169	..						
Small fruit	68	987	215	192	12	1,422	..	..	2,896
Other fruit	1,765	3,100	4,140	1,487	616	24	12	6	11,150
Total	**95,798**	**71,158**	**51,391**	**45,113**	**25,598**	**21,762**	**98**	**37**	**310,955**
PRODUCTION ('000 BUSHELS)									
Apples	3,287	3,875	1,071	1,378	2,060	7,943	..	1	19,615
Apricots	242	504	40	683	37	12	..	..	1,519
Bananas	4,135	..	883	..	127	..	(a)	..	(b)5,145
Cherries	115	178	..	53	2	3	..	..	351
Citrus—									
Oranges	5,165	1,121	833	2,243	482	..	2	..	9,846
Mandarins	262	80	402	79	42	..	..	..	865
Lemons and limes	573	170	130	51	143	..	1	..	1,066
Peaches	1,391	3,344	176	1,243	136	4	..	..	6,294
Pears	582	5,342	125	610	182	511	..	..	7,351
Pineapples	37	..	6,767	..	..	..	(a)	..	(b)6,804
Plums	123	145	105	80	143	13	..	..	778
Prunes	152	16	..						

(a) Not available for publication. (b) Incomplete; *see* individual States.

Principal fruit crops

PRINCIPAL FRUIT CROPS: AREA, PRODUCTION, AND GROSS VALUE OF PRODUCTION, AUSTRALIA, 1963-64 TO 1967-68

Year	*Apples*	*Apricots*	*Bananas*	*Oranges*	*Peaches*	*Pears*	*Pineapples*	*Plums and prunes*
AREA, BEARING AND NOT BEARING (ACRES)								
1963–64	92,859	11,890	29,709	59,211	30,237	25,870	11,086	10,963
1964–65	94,870	11,274	26,762	60,497	30,387	26,079	11,582	10,515
1965–66	94,865	11,427	26,555	61,517	30,036	25,941	12,938	10,474
1966–67	94,973	11,313	26,213	60,982	30,068	25,558	15,073	10,157
1967–68	92,591	10,925	26,398	59,830	29,735	25,627	15,550	10,026

PRINCIPAL FRUIT CROPS: AREA, PRODUCTION AND GROSS VALUE OF PRODUCTION, AUSTRALIA, 1963–64 TO 1967–68—*continued*

Year	*Apples*	*Apricots*	*Bananas*	*Oranges*	*Peaches*	*Pears*	*Pineapples*	*Plums and prunes*
				PRODUCTION ('000 BUSHELS)				
1963–64	19,285	1,610	5,324	8,735	4,366	6,916	4,445	1,039
1964–65	18,897	1,968	5,028	10,836	5,078	5,920	4,363	1,068
1965–66	19,783	1,778	4,694	9,137	5,508	7,485	4,924	952
1966–67	19,418	2,405	4,901	10,677	5,913	6,557	6,059	1,204
1967–68	19,615	1,519	5,145	9,846	6,294	7,351	6,804	778
				GROSS VALUE OF PRODUCTION ($'000)				
1963–64	44,862	4,802	16,442	20,834	10,084	14,900	5,150	4,036
1964–65	46,577	5,508	18,585	23,547	12,676	14,753	5,491	4,544
1965–66	47,631	5,119	20,409	22,037	13,795	17,674	6,165	3,419
1966–67	52,108	6,912	20,319	25,327	13,912	15,913	7,137	5,149
1967–68	49,741	4,637	19,636	24,496	14,123	16,469	6,470	3,362

Production and consumption of jams and jellies and preserved fruit

In Australia considerable quantities of fruit are used in the production of jams and jellies and for preserving. During 1967–68 output of jams, conserves, fruit spreads, etc., amounted to 83,917,000 lb, while output of preserved fruit amounted to 659,700,000 lb. Of the latter figure, peaches accounted for 253,592,000 lb, pears 152,780,000 lb, and pineapples 72,820,000 lb.

In 1967–68, 9,102,000 cwt of fruit was recorded as used in factories classified to the sub-classes Oils, vegetable; Jam, fruit and vegetable canning; Condiments, coffee, spices; Aerated waters and cordials; and Dehydrated fruit and vegetables. Details of the estimated consumption of fruit and fruit products per head of population for a series of years ending 1967–68 are shown in the chapter Miscellaneous.

Imports and exports of fruit and fruit products

The imports of fresh fruit into Australia are negligible, while those of dried fruit consist mainly of dates obtained almost entirely from Iraq and Iran. A considerable export trade in both fresh and dried fruit is carried on by Australia with overseas countries. The values of the shipments in 1967–68 amounted to $27,538,000 and $22,790,000 respectively. Apples constitute the bulk of the fresh fruit exported, although exports of pears and citrus fruit are considerable.

FRESH AND FROZEN FRUIT: EXPORTS, AUSTRALIA, 1963-64 TO 1967-68

Year	*Apples*		*Pears*		*Citrus*		*Total value*(*a*)
	Quantity	*Value*	*Quantity*	*Value*	*Quantity*	*Value*	
	'000lb	$'000 f.o.b.	'000lb	$'000 f.o.b.	'000lb	$'000 f.o.b.	$'000 f.o.b.
1963–64 . .	344,904	24,036	74,970	5,294	46,272	2,986	33,156
1964–65 . .	296,142	20,989	65,745	5,297	51,936	3,382	30,543
1965–66 . .	351,246	25,863	94,005	7,464	58,080	3,685	37,819
1966–67 . .	288,834	18,280	64,620	4,800	58,656	3,779	27,869
1967–68 . .	277,814	17,368	68,922	5,442	54,875	3,656	27,538

(*a*) Includes exports of all other fresh and frozen fruit.

The quantity and value of overseas imports and exports of dried fruit, other than raisins and currants, for the years 1963–64 to 1967–68 are shown on the following page.

DRIED TREE FRUIT(*a*): IMPORTS AND EXPORTS, AUSTRALIA 1963-64 TO 1967-68

Year	*Imports(b)*		*Exports*	
	Quantity	*Value*	*Quantity*	*Value*
	'000 lb	$'000 f.o.b.	'000 lb	$'000 f.o.b.
1963–64 . . .	10,262	604	8,479	1,988
1964–65 . . .	8,454	601	9,415	1,808
1965–66 . . .	8,145	557	11,907	2,450
1966–67 . . .	8,936	671	8,038	2,037
1967–68 . . .	8,996	750	8,027	2,016

(*a*) Excludes sultanas, raisins and currants dealt with separately under Vineyards (*see* page 878). (*b*) Dates and figs only.

Exports of jams and jellies in 1967–68 were 10,361,000 lb, valued at $1,463,000, compared with 8,731,000 lb, valued at $1,227,000 in 1966–67. Imports of jams and jellies in 1967–68 were 1,637,000 lb, valued at $324,000, compared with 1,045,000 lb, valued at $247,000 in 1966–67.

Large quantities of canned or bottled fruit are normally exported from Australia, the quantity recorded in 1967–68 being 425,328,000 lb valued at $50,661,000. Exports in 1967–68 were made up principally of peaches (198,736,000 lb), pears (108,712,000 lb), fruit salad (37,673,000 lb), pineapples (33,898,000 lb), and apricots (17,729,000 lb). In addition, the exports of pulped fruits during 1967–68 amounted to 1,108,000 lb valued at $188,000.

The total value of preserved fruit and fruit preparations (including fruit juices) imported into Australia during 1967–68 was $2,491,000. The value of exports of fruit juices in 1967–68 was $943,000.

Vineyards

Grapes require a warm to hot climate and a predominantly winter rainfall. Freedom from late spring frosts is essential. They are grown for wine-making, drying and, to a minor extent, for table use. In Australia wine is produced very largely from irrigated crops, as are dried fruits. Some of the better known wine producing areas are the Murray Valley (South Australia and Victoria), Barossa Valley and Southern Vales Areas (South Australia), the Murrumbidgee Irrigation Areas and the Hunter Valley (New South Wales), the Mildura, Rutherglen and Stawell districts of Victoria, and the Swan Valley (Western Australia). Nearly all the dried fruit is produced along the River Murray and its tributaries, with small localised areas in the other States.

Area of vineyards

The area under vineyards in the 1967–68 season in Victoria and South Australia constituted 76 per cent of the total area of vineyards.

VINEYARDS: AREA(*a*), STATES, 1936-37 TO 1967-68

(Acres)

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Aust.*
Average for three years ended—						
1938–39 . .	16,824	42,071	2,670	57,185	6,197	124,947
1948–49 . .	16,482	44,114	3,099	58,971	9,965	132,631
1958–59 . .	17,210	44,823	2,926	57,199	8,967	131,125
Year—						
1963–64 . .	18,715	46,501	3,276	58,679	8,629	135,800
1964–65 . .	20,464	47,996	3,299	58,857	8,310	138,926
1965–66 . .	21,292	48,617	3,268	58,730	8,215	140,122
1966–67 . .	21,257	49,164	3,304	57,080	7,945	138,750
1967–68(*b*)—						
Drying . .	8,248	38,830	. .	7,341	2,901	57,320
Table . .	2,832	3,203	3,135	238	1,303	10,711
Wine . .	11,075	6,692	265	50,550	3,460	72,042
Total . .	**22,155**	**48,725**	**3,400**	**58,129**	**7,665**	**140,074**

(*a*) Bearing and not bearing. (*b*) Area of individual categories is shown according to ultimate use to which grapes are put.

Wine industry

Australia produces wine of every type and also brandy. In recent years there has been a distinct trend towards greater consumption and production of unfortified or table wines. Until 1957–58 production of these wines (which include burgundy, claret, riesling, sauterne, and sparkling wines) was less than half that of the fortified varieties (sherries, ports, etc.). By 1967–68 production of table wines had reached a volume almost equal to that of fortified varieties.

The *Wine Overseas Marketing Act* 1929–1966 was introduced to place the overseas marketing of wine on an orderly basis. The Australian Wine Board, consisting of representatives from wineries and distilleries, grape-growers and the Commonwealth Government, supervises the sale and distribution of Australian wine exported and recommends conditions under which export licences should be issued. The Board also engages in wine publicity and trade promotion activities both in Australia and overseas. In London the Board maintains an Australian Wine Centre, which is a medium for promoting interest in Australian wines and brandy. It is also a retail shop for the sale of these products. The *Wine Grapes Charges Act* 1929–1966 provides for the imposition of a levy on all grapes used in Australia for the manufacture of wine, brandy and spirit used for fortifying wine. The proceeds of the levy are used to meet the Board's projects in Australia and overseas and to defray the administrative expenses of the Board, which has no other source of income.

Production and consumption of wine and brandy

In 1967–68 the total production of wine (beverage and distillation) in Australia was 44.3 million gallons, while total consumption of beverage wine was 19.8 million gallons (1.66 gallons per head of population). Similar particulars for 1966–67 are 41.5 million gallons and 17.5 million gallons (1.49 gallons per head of population) respectively.

WINE: PRODUCTION(*a*), STATES, 1936-37 TO 1967-68

('000 gallons)

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Aust.*
Average for three years ended—						
1938–39 . .	2,712	1,359	31	14,021	396	18,519
1948–49 . .	4,178	3,040	31	25,906	689	33,844
1958–59 . .	3,974	2,435	36	25,190	743	32,378
Year—						
1963–64 . .	6,030	3,705	33	27,102	666	37,536
1964–65 . .	6,404	3,656	24	28,022	613	38,718
1965–66 . .	6,439	3,151	24	23,884	627	34,125
1966–67 . .	7,893	3,555	37	29,324	705	41,514
1967–68 . .	8,350	5,180	31	30,130	616	44,307

(*a*) Net factory and farm production of beverage and distillation wine excluding the liquid gallonage of spirits added in wine fortifying.

BRANDY: PRODUCTION, SOUTH AUSTRALIA AND AUSTRALIA, 1936-37 TO 1967-68

(Proof gallons)

Period	*S.A.*	*Aust.(a)*
Average for three years ended—		
1938–39 . .	446,251	505,474
1948–49 . .	648,641	714,688
1958–59 . .	1,009,040	1,149,032
Year—		
1963–64 . .	1,052,850	1,219,968
1964–65 . .	1,183,351	1,400,100
1965–66 . .	1,167,309	1,371,217
1966–67 . .	650,618	791,163
1967–68 . .	715,147	872,428

(*a*) Includes New South Wales and Victoria, for which separate details are not available for publication.

Exports and imports of wine and brandy

Principal markets for exports of Australian wine are the United Kingdom, Canada and New Zealand. During 1967–68 these countries received 1,040,000 gallons, 409,000 gallons and 116,000 gallons respectively. Exports of Australian-produced wine for the five years ended 1967–68 are shown in the following table.

WINE: EXPORTS, AUSTRALIA, 1963-64 TO 1967-68

	Quantity ('000 gals)			*Value ($'000 f.o.b.)*		
Year	*Sparkling*	*Other*	*Total*	*Sparkling*	*Other*	*Total*
1963–64 . . .	10	1,526	1,537	62	2,679	2,741
1964–65 . . .	16	1,976	1,992	96	3,425	3,521
1965–66 . . .	35	1,922	1,957	171	3,364	3,535
1966–67 . . .	65	1,709	1,774	251	2,917	3,169
1967–68 . . .	88	1,751	1,839	359	2,794	3,153

Imports of wine for 1967–68 amounted to 305,000 gallons valued at $1,364,000, compared with 189,000 gallons valued at $828,000 in the previous year. During 1967–68 Italy supplied 120,000 gallons valued at $417,000, France 71,000 gallons valued at $532,000 and the Federal Republic of Germany 29,000 gallons valued at $144,000.

Exports of Australian-produced brandy in 1967–68 amounted to 92,000 proof gallons, valued at $422,000. Imports of brandy, mainly from France, amounted to 133,000 proof gallons, valued at $736,000.

Dried vine fruit industries

The dry period from November to March in the lower Murray valley makes this an ideal area for dried vine fruit. Harvesting for drying takes place at the end of summer. The sun-drying process is often accelerated by using a dip of cold potash.

The *Dried Fruits Export Control Act* 1924–1966 was passed to organise overseas marketing of Australian dried vine fruit. The Australian Dried Fruits Control Board, consisting of growers' representatives, members with commercial experience in marketing dried fruits and a Government representative, controls the sale and distribution of dried fruit exports, recommends the licensing of exporters and contributes to dried vine fruit publicity activity overseas. In conjunction with its London office, the Board has improved dried fruit marketing overseas by its system of appraisement, regulation of shipments and advertising. The *Dried Fruits Export Charges Act* 1924–1965 provides for a levy on exports of dried fruit to defray costs and expenses incurred by the Board.

For details of the bulk purchase agreements between the Governments of the United Kingdom and Australia which operated during the period 1946–53 *see* Year Book No. 40, page 888. From 1 December 1953 exports to the United Kingdom have been on a trader to trader basis.

In June 1963 Australian, Greek and Turkish dried vine fruit interests concluded an agreement to maintain minimum prices for sultanas on world markets. The agreement, which aims at international price stability, is periodically reviewed. A permanent committee of the contracting parties was established in London for the purpose of supervising the working of the agreement, and a subcommittee of the permanent committee was established in Hamburg in 1964.

The Dried Vine Fruits Stabilization Scheme was introduced under the *Dried Vine Fruits Stabilization Act* 1964–1966 to stabilise seasonal returns to growers of currants, sultanas and raisins. Its main features are as follows.

Growers are guaranteed an average return from seasonal sales of currants, sultanas and raisins equal to the average cost of production of each variety less $10.00 a ton.

The maximum quantities for which returns are guaranteed each season are 13,500 tons of currants, 75,000 tons of sultanas and 11,000 tons of raisins.

Growers are required to contribute to separate varietal stabilisation funds when the average return to the industry from seasonal sales of a variety exceeds cost of production by more than $10.00 a ton, with a limit on such contributions of $20.00 a ton.

When the quantity received for packing in any season does not reach 8,000 tons of currants, 50,000 tons of sultanas or 6,000 tons of raisins, growers are not required to contribute to the stabilisation fund for the variety concerned.

Contributions are to be made by the Commonwealth to raise average returns to the guaranteed price when there is insufficient industry money in a stabilisation fund for this purpose.

Limits are set to the accumulation of money in the stabilisation funds. These are $1,000,000 in the case of both the currant and raisin stabilisation funds, and $4,000,000 in the case of the sultana stabilisation fund.

Where these limits are exceeded during the operation of the scheme, the excess will be used first to reimburse the Government for any contribution it may have made to a fund; any balance will be repaid to growers on a first-in first-out basis.

The scheme is to operate for five years. At the end of the fifth year any credit balance in the stabilisation funds will be used, in the first instance, to reimburse the Government for unrepaid contributions (if any). If the scheme is not renewed any remaining money will be returned to growers.

Growers' contributions for the scheme are collected under the *Dried Vine Fruits Contributory Charges Act* 1964–1966 and the *Dried Vine Fruits Contributory Charges (Collection) Act* 1964–1966.

DRIED VINE FRUIT: PRODUCTION, STATES, 1936-37 TO 1967-68

(Tons)

	N.S.W.		*Vic.*		*S.A.*		*W.A.*		*Aust.*	
Period	*Raisins (a)*	*Currants*	*Raisins (a)*	*Currants*	*Raisins (a)*	*Currants*	*Raisins (a)*	*Currants*	*Raisins (a)*	*Currants*
Average for three years ended—										
1938–39 . .	5,464	1,163	39,810	8,953	13,215	9,009	723	2,179	59,212	21,304
1948–49 . .	5,429	994	40,027	7,380	8,811	5,243	580	3,179	54,847	16,796
1958–59 . .	10,300	705	53,178	4,294	11,115	4,432	118	1,746	74,711	11,177
Year—										
1963–64 . .	13,563	709	66,138	3,934	13,159	4,533	121	2,166	92,981	11,342
1964–65 . .	12,841	632	66,153	4,477	16,325	5,044	75	2,364	95,394	12,517
1965–66 . .	11,480	449	59,418	3,127	11,915	3,153	116	1,306	82,929	8,035
1966–67 . .	14,108	643	69,628	3,588	13,544	3,773	67	1,353	97,347	9,357
1967–68 . .	12,463	585	59,222	3,166	5,200	3,112	40	1,668	76,925	8,531

(*a*) Includes sultanas and lexias.

DRIED VINE FRUIT(*a*): EXPORTS, AUSTRALIA, 1963-64 TO 1967-68

	Raisins, sultanas and lexias		*Currants*		*Total*	
Year	*Quantity*	*Value*	*Quantity*	*Value*	*Quantity*	*Value*
	tons	$'000 f.o.b.	tons	$'000 f.o.b.	tons	$'000 f.o.b.
1963–64 . . .	57,451	17,442	5,512	1,601	62,963	19,043
1964–65 . . .	63,197	20,324	6,532	1,968	69,729	22,292
1965–66 . . .	74,704	24,070	6,102	1,918	80,805	25,988
1966–67 . . .	63,561	19,720	4,301	1,428	67,862	21,148
1967–68 . . .	63,562	19,459	3,907	1,316	67,469	20,775

(*a*) Excludes quantities exported as mincemeat.

The chief countries importing Australian dried vine fruit are the United Kingdom, Canada, the Federal Republic of Germany, New Zealand, and Ireland. The quantities exported to these countries in 1967–68 were 27,925 tons, 16,910 tons, 7,356 tons, 5,954 tons, and 2,030 tons respectively.

Table grapes

Grapes for table use are grown in all States except Tasmania, but the area of this type was only about 8 per cent of the productive area of vines in 1967–68. The quantities of table grapes produced during the season 1967–68 in each State are shown on page 830.

PASTORAL PRODUCTION

Livestock numbers

A detailed account of the various enumerations of livestock in Australia made prior to 1860 was given on page 748 of Year Book No. 35. Since 1860 annual enumerations have been made, based, with few exceptions, on actual collections made through the agency of the State police or by post. Particulars concerning the numbers of each of the principal kinds of livestock in Australia, at decennial intervals from 1860 to 1960, and from 1964 onwards in single years, are given in the following table, and are shown continuously since 1870 on the graph on plate 42 following.

LIVESTOCK: AUSTRALIA, 1860 TO 1968
('000)

Year	*Horses*	*Cattle*	*Sheep*	*Pigs*	*Year*	*Horses*	*Cattle*	*Sheep*	*Pigs*
1860	432	3,958	20,135	351	1940	1,699	13,080	119,305	1,455
1870	717	4,276	41,594	543	1950	1,057	14,640	112,891	1,123
1880	1,069	7,527	62,184	816	1960	640	16,503	155,174	1,424
1890	1,522	10,300	97,881	891	1964	536	19,055	164,981	1,468
1900	1,610	8,640	70,603	950	1965	520	18,816	170,622	1,660
1910	2,166	11,745	98,066	1,026	1966	n.a.	17,936	157,563	1,747
1920	2,416	13,500	81,796	764	1967	479	18,270	164,237	1,804
1930	1,793	11,721	110,568	1,072	1968	n.a.	19,218	166,912	2,056

While livestock numbers (particularly sheep) have increased substantially since 1860, marked fluctuations have taken place during the period, mainly on account of widespread droughts which have from time to time left their impressions on the pastoral history of Australia. These occurred in 1868, 1877, 1883–84, 1892, 1893, 1895, 1901–02, 1912, 1914, 1918, 1919, 1922–23, 1925–26, 1927–28, 1929–30, 1940–41, 1944–45 to 1946–47, and 1965–67. The years in which the numbers of livestock attained their peaks are as follows: horses, 1919 (2,527,000); cattle, 1968 (19,218,000); sheep, 1965 (170,622,000); and pigs, 1968 (2,056,000).

The distribution throughout Australia of sheep, beef cattle, dairy cattle, and pigs at 31 March 1963 is shown in the maps on pages 1049 and 1050 and facing pages 1082 and 1083 of Year Book No. 50.

The numbers of horses, cattle, sheep, and pigs in each State and Territory are shown later in this chapter.

Value of pastoral production

Values of pastoral production are shown for 1967–68 and earlier years in the following tables. Further details of the source of the information and an explanation of the terms used in this compilation will be found in the chapter Miscellaneous. Maintenance costs and depreciation have not been deducted; consequently the net values are inflated to the extent of these amounts.

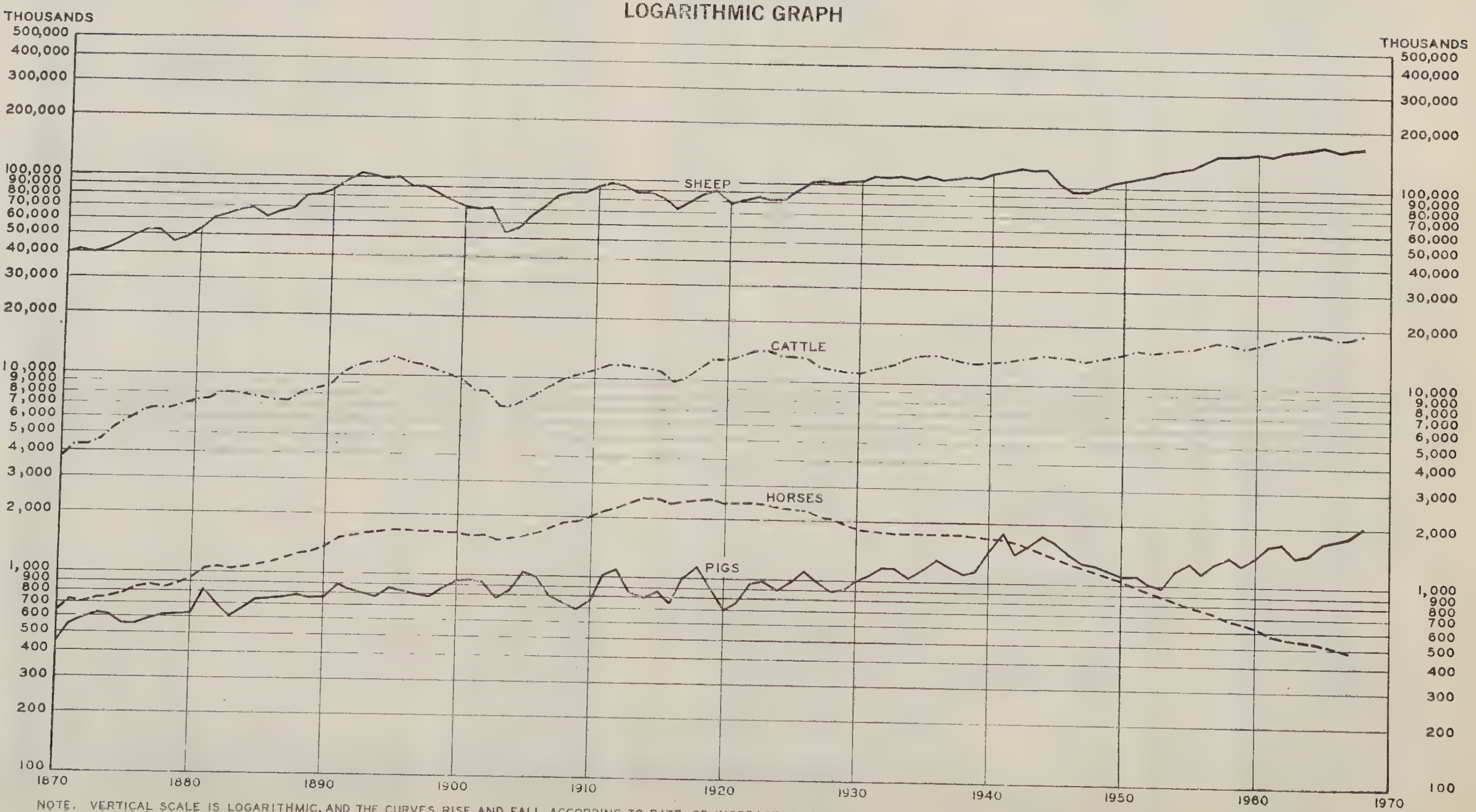
GROSS, LOCAL AND NET VALUES OF PASTORAL PRODUCTION: STATES AND TERRITORIES, 1967–68
($'000)

State or Territory	*Gross production valued at principal markets*	*Marketing costs*	*Local value of production*	*Value of materials used in process of production*	*Net value of production(a)*
New South Wales	431,411	40,281	391,130	(*b*)60,792	330,338
Victoria	355,318	30,547	324,772	70,584	254,187
Queensland	273,438	21,215	252,223	36,389	215,834
South Australia	129,504	8,310	121,194	22,472	98,722
Western Australia	158,754	13,229	145,525	26,295	119,231
Tasmania	30,821	2,136	28,685	16,215	12,469
Northern Territory	14,235	2,060	12,175	n.a.	12,175
Australian Capital Territory	1,750	139	1,611	131	1,480
Australia	**1,395,231**	**117,917**	**1,277,315**	**232,878**	**1,044,436**

(*a*) No deduction has been made for depreciation and maintenance. (*b*) No allowance has been made for costs of power, power kerosene, petrol and other oils.

LIVESTOCK: AUSTRALIA, 1870 TO 1968

LOGARITHMIC GRAPH



NOTE. VERTICAL SCALE IS LOGARITHMIC, AND THE CURVES RISE AND FALL ACCORDING TO RATE OF INCREASE OR DECREASE; ACTUAL NUMBERS ARE INDICATED BY SCALE.

PLATE 42

NET VALUE OF PASTORAL PRODUCTION(a): STATES AND TERRITORIES 1963–64 TO 1967–68

Year	*N.S.W.(b)*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
NET VALUE ($'000)									
1963–64 .	503,090	323,696	235,774	125,978	123,544	19,566	6,890	2,040	1,340,578
1964–65 .	451,368	309,668	220,988	110,054	101,069	21,040	5,372	1,741	1,221,300
1965–66 .	356,470	346,230	198,898	123,757	129,773	22,319	9,742	1,347	1,188,536
1966–67 .	351,488	315,142	222,178	134,608	126,049	21,566	9,256	1,561	1,181,848
1967–68 .	330,338	254,187	215,834	98,722	119,231	12,469	12,175	1,480	1,044,436
NET VALUE PER HEAD OF POPULATION ($)									
1963–64 .	123.34	105.32	147.82	123.09	154.66	53.94	137.77	26.51	121.22
1964–65 .	108.96	98.74	135.83	104.60	123.68	57.43	101.76	20.63	108.28
1965–66 .	84.68	108.40	119.81	114.39	154.99	60.39	175.79	14.54	103.35
1966–67 .	82.26	96.97	131.62	121.93	146.21	57.68	159.36	15.62	100.94
1967–68 .	75.99	76.97	125.64	88.29	133.59	32.87	200.00	13.68	87.57

(a) No deduction has been made for depreciation and maintenance. (b) No allowance has been made for costs of power, power kerosene, petrol and other oils.

Indexes of quantum and price of pastoral production, 1963-64 to 1967-68

The quantum indexes shown in the following table relate to gross output of farm products valued at constant prices. The quantities of each farm product produced each year have been revalued at the unit gross value for the period 1936–37 to 1938–39. The price indexes relate to average 'prices' of farm products realised in the principal markets of Australia. Average quantities of each product marketed in the period 1946–47 to 1950–51 have been used as fixed weights. For further details of the methods of calculating these indexes and of the weights used *see* the chapter Miscellaneous.

INDEXES OF QUANTUM(a) AND PRICE OF PASTORAL PRODUCTION AUSTRALIA, 1963–64 TO 1967–68

(*Base: Average* 3 *years ended June* 1939 = 100)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Quantum(a) produced—					
Wool	183	183	169	180	180
Other products	158	158	157	151	165
Total, pastoral	*172*	*172*	*163*	*167*	*174*
Per head of population . .	107	105	97	98	100
Price—					
Wool	531	437	458	433	382
Other products	480	496	567	593	573
Total, pastoral	*511*	*460*	*501*	*496*	*457*

(a) Index of value at constant prices, i.e. quantities revalued at average unit values of base years 1936–37 to 1938–39.

Sheep

Distribution throughout Australia

With the exception of a short period in the early eighteen-sixties, when the flocks of Victoria outnumbered those of New South Wales, the latter State has occupied the premier position in sheep-raising, although its relative importance has declined somewhat in recent years, due, among other factors, to heavy losses caused by drought conditions in 1965–66. Concurrently, there has been a marked increase in the sheep population of Western Australia, where figures have doubled in little more than a decade to give that State second position of importance in terms of sheep numbers.

A map showing the distribution of sheep in Australia at 31 March 1963 appears on page 1049 of Year Book No. 50. Graphs showing the number of sheep in Australia from 1870 onwards appear on plates 42 and 43 of this Year Book (pages 880 and 890).

SHEEP: NUMBERS IN STATES AND TERRITORIES, 1937 TO 1968

('000)

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Average for three years ended—									
1939 . . .	51,202	17,845	21,889	8,916	8,972	2,460	23	251	111,558
1949 . . .	46,525	17,900	16,442	8,793	10,368	2,060	24	227	102,339
1959 . . .	67,006	26,615	22,537	15,285	15,609	3,259	25	265	150,601
At 31 March—									
1964 . . .	71,764	28,413	24,337	16,403	20,165	3,600	10	289	164,981
1965 . . .	72,396	30,437	24,016	17,289	22,392	3,793	9	290	170,622
1966 . . .	61,396	30,968	18,384	17,993	24,427	4,127	9	258	157,563
1967 . . .	63,848	31,239	19,305	17,864	27,370	4,321	8	281	164,237
1968 . . .	67,786	27,909	19,948	16,405	30,161	4,428	9	267	166,912

The percentage distribution of sheep and lambs in the several States in 1968 was: New South Wales, 41; Victoria, 17; Queensland, 12; South Australia, 10; Western Australia, 18; and Tasmania, 2.

Movement in sheep numbers

SHEEP AND LAMBS: ANALYSIS OF MOVEMENT IN NUMBERS, AUSTRALIA 1963–64 TO 1967–68

('000)

Year ended 31 March	*Numbers at beginning of season*	*Lambs marked*	*Net exports*	*Sheep and lambs slaughtered (a)*	*Estimated deaths on farms (b)*	*Numbers at close of season*
1964	158,626	47,818	312	33,240	7,911	164,981
1965	164,981	47,608	307	33,549	8,111	170,622
1966	170,622	40,330	273	33,671	19,445	157,563
1967	157,563	47,830	337	33,350	7,469	164,237
1968	164,237	50,648	362	38,145	9,466	166,912

(*a*) Includes an estimate for numbers boiled down. (*b*) Balance figure; excludes lambs which died before marking.

Comparisons of Australian flock numbers with those of certain other principal sheep-producing countries are given on page 896.

Classification of sheep according to age, sex, and breed

SHEEP, BY AGE AND SEX: AUSTRALIA, 31 MARCH 1964 TO 1968
('000)

Description	*1964*	*1965*	*1966*	*1967*	*1968*
Rams, 1 year and over	1,986	2,047	2,002	2,013	2,079
Breeding ewes (including ewes intended for mating)	72,862	75,580	73,626	76,618	76,698
Other ewes, 1 year and over	8,631	8,952	7,397	7,117	7,873
Wethers, 1 year and over	46,203	49,284	45,649	44,186	42,512
Lambs and hoggets, under 1 year	35,299	34,759	28,890	34,302	37,750
Total, sheep and lambs	**164,981**	**170,622**	**157,563**	**164,237**	**166,912**

Particulars of the principal breeds of sheep at 31 March 1968 (details are collected on a triennial basis) are shown in the following table.

SHEEP, BY PRINCIPAL BREED: STATES AND TERRITORIES, 31 MARCH 1968
('000)

Breed	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Merino	48,977	12,810	19,414	13,418	27,286	315	9	209	122,438
Other recognised breeds	6,333	6,909	203	1,383	1,304	2,809	..	14	18,954
Merino comeback(*a*)	1,846	1,584	52	214	339	476	..	5	4,516
Crossbreds(*b*)	10,630	6,605	279	1,391	1,232	829	..	39	21,005
Total	**67,786**	**27,909**	**19,948**	**16,405**	**30,161**	**4,428**	**9**	**267**	**166,912**

(*a*) Merino comeback is the progeny of a crossbred Merino ewe and a Merino ram, i.e. finer than half-bred. (*b*) Half-bred and coarser.

Exports and imports of sheep

The overseas exports of live sheep from Australia are of comparatively minor importance. On 27 November 1929 the export of stud Merino sheep was prohibited, except with the approval of the Minister for Primary Industry. Exports of sheep are now principally for slaughter overseas. Consignments for this purpose in recent years were made chiefly from Western Australia to Kuwait and Singapore. In 1967–68 the number of sheep exported was 358,143, valued at $3,301,000 (1966–67, 340,382, valued at $3,254,000). Since June 1958 an embargo has been imposed on the import of sheep in order to prevent the introduction of the disease 'blue-tongue'.

Cattle

Objects of cattle-raising in Australia

Cattle-raising is carried out in all States, the main object in certain districts being the production of stock suitable for slaughtering purposes and in others the raising of profitable dairy herds. While dairy cattle are restricted mainly to coastal districts, beef cattle are more widely distributed, particularly in the eastern States, and are raised in areas unsuitable for dairy cattle, such as the tropical area of northern Queensland, the Northern Territory and the Kimberley district in the north of Western Australia.

Distribution throughout Australia

Although cattle numbers declined after 1957 because of drought conditions and heavy slaughterings, they began to rise again in 1960 and in 1964 reached 19,055,000. Again because of drought in the eastern States, this figure declined to 17,936,000 in 1966, but recovered to reach a record level of 19,218,000 in 1967–68.

A graph showing the number of cattle in Australia from 1870 onwards appears on plate 42, page 880.

CATTLE: NUMBERS IN STATES AND TERRITORIES, 1937 TO 1968

('000)

Period	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Average for three years ended—									
1939	3,040	1,861	6,002	324	767	260	882	8	13,144
1949	3,122	2,153	5,971	443	830	244	1,006	9	13,778
1959	3,770	2,722	7,177	598	985	367	1,173	10	16,802
At 31 March—									
1964	4,789	3,301	7,402	694	1,299	450	1,105	15	19,055
1965	4,619	3,316	7,393	697	1,258	451	1,068	14	18,816
1966	4,153	3,397	6,888	690	1,271	492	1,032	13	17,936
1967	4,146	3,528	6,919	687	1,357	522	1,097	14	18,270
1968	4,555	3,474	7,361	695	1,427	564	1,130	13	19,218

The percentage of cattle in each State and Territory during 1968 was: New South Wales, 24; Victoria, 18; Queensland, 38; South Australia, 4; Western Australia, 7; Tasmania, 3; and Northern Territory, 6.

Maps showing the distribution of beef and dairy cattle in Australia appear on page 1050 and facing page 1082 of Year Book No. 50, and maps showing the distribution in earlier years were published in previous issues of the Year Book.

Classification of cattle

CATTLE, BY PURPOSE, AGE AND SEX: STATES AND TERRITORIES, 31 MARCH 1968

('000)

Classification	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.(a)*	*A.C.T.*	*Aust.*
Bulls (1 year and over) used or intended for service—									
Dairy breeds . .	17	39	14	5	3	4	..	..	82
Beef breeds . . .	68	37	120	11	23	6	34	..	299
Total bulls . .	*85*	*76*	*134*	*16*	*26*	*10*	*34*	..	*381*
Cattle used or intended for production of—									
Milk or cream for sale—									
Cows (in milk and dry)	645	1,200	556	139	100	152	..	1	2,794
Heifers—Springing (within 3 months of calving) . .	154	338	128	18	21	43	..	..	755
Other (1 year and over) . .				24	28				
Calves (under 1 year) . .	134	345	99	36	30	45	..	..	689
Milk or cream for use on rural holdings—									
House cows and heifers . .	86	26	35	7	9	6	..	..	169
Total cattle, production of milk, etc.	*1,019*	*1,910*	*818*	*224*	*188*	*246*	*1*	*2*	*4,407*
Cattle for other purposes(*b*)—									
Cows and heifers (1 year and over) . . .	1,815	741	3,220	257	633	130	648	6	7,450
Calves (under 1 year)(*c*) .	1,122	478	1,493	141	305	118	208	3	3,868
Other (1 year and over), i.e. steers, bullocks, speyed cows, etc.	513	270	1,696	57	275	60	240	1	3,113
Total cattle, other purposes . .	*3,450*	*1,489*	*6,409*	*455*	*1,213*	*308*	*1,095*	*10*	*14,431*
Total cattle and calves for all purposes . .	**4,555**	**3,474**	**7,361**	**695**	**1,427**	**564**	**1,130**	**13**	**19,218**

(*a*) As at 30 June 1968. (*b*) Mainly for meat production. (*c*) Includes vealers, and bull calves intended for service.

CATTLE, BY PURPOSE, AGE AND SEX: AUSTRALIA, 31 MARCH 1965 TO 1968

('000)

Classification	*1964*	*1965*	*1966*	*1967*	*1968*
Bulls (1 year and over) used or intended for service—					
Dairy breeds	99	95	90	87	82
Beef breeds	278	274	261	279	299
Total bulls	*377*	*369*	*359*	*367*	*381*
Cattle used or intended for production of—					
Milk or cream for sale—					
Cows (in milk and dry)	3,078	3,012	2,098	2,881	2,794
Heifers—Springing (within 3 months of calving) and other (1 year and over)	821	843	823	796	755
Calves (under 1 year)	718	690	681	672	689
Milk or cream for use on rural holdings—					
House cows and heifers	218	202	186	180	169
Total cattle, production of milk, etc.	*4,835*	*4,747*	*4,598*	*4,528*	*4,407*
Cattle for other purposes(*a*)—					
Cows and heifers (1 year and over)	7,021	7,073	6,692	6,886	7,450
Calves (under 1 year)(*b*)	3,536	3,378	3,063	3,392	3,868
Other (1 year and over), i.e. steers, bullocks, speyed cows, etc.	3,286	3,248	3,232	3,097	3,113
Total cattle, other purposes	*13,842*	*13,699*	*12,987*	*13,375*	*14,431*
Total cattle and calves for all purposes	**19,055**	**18,816**	**17,936**	**18,270**	**19,218**

(*a*) Mainly for meat production. (*b*) Includes vealers, and bull calves intended for service.

For beef cattle and dairy cattle numbers prior to 1964 *see* pages 1056 and 1078 respectively of Year Book No. 50.

Exports and imports of cattle

In 1967–68 the number of cattle exported was 3,989, valued at $563,000 (1966–67, 5,480 valued at $1,108,000). Prior to June 1958 small numbers of cattle were imported, consisting mainly of valuable animals for stud purposes. Since that date an embargo has been imposed on the import of cattle in order to prevent the introduction of the disease 'blue-tongue'.

Comparison with other countries

The following table shows the number of cattle in Australia and in some of the principal cattle-raising countries of the world at the latest available date.

CATTLE: NUMBERS IN VARIOUS COUNTRIES

Source (for countries other than Australia): *World Agricultural Production and Trade*, United States Department of Agriculture

('000)

Country	*Year and month*	*Number* p
India(*a*)	1962 (May)	236,000
United States of America	1969 (January)	109,661
U.S.S.R.	1969 (January)	95,700
Brazil	1968 (December)	89,992
China (mainland)(*a*)	1960 (December)	65,400
Argentina	1968 (June)	51,465
Pakistan(*a*)	1961 (Estimate)	30,300
Mexico	1969 (December)	24,000
Ethiopia	1963 (Estimate)	22,000
France	1969 (October)	21,918
Colombia	1969 (October)	19,583
Australia	**1968 (March)**	**19,218**
Turkey(*a*)	1969 (December)	15,750
Germany, Federal Republic of	1969 (December)	14,045
South Africa	1968 (June)	12,145
United Kingdom	1969 (December)	12,123

(*a*) Includes buffaloes.

Horses

The number of horses in Australia reached a peak of 2,527,000 in 1919. Since then it has declined, because of mechanisation of transport and farming, and the number recorded at 31 March 1967 was 479,000. In future, particulars of horses will be collected only at triennial intervals.

A graph showing the number of horses in Australia since 1870 appears on plate 42, page 880.

HORSES: NUMBERS IN STATES AND TERRITORIES, 1964 TO 1968
('000)

31 March—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1964 . .	163	56	206	(*a*)25	39	8	38	1	(*b*)536
1965 . .	158	56	201	(*a*)24	37	7	36	1	(*b*)520
1966 . .	151	n.a.	190	n.a.	35	n.a.	37	1	n.a.
1967 . .	146	55	182	16	35	7	38	1	479
1968 . .	n.a.	n.a.	181	n.a.	n.a.	n.a.	38	1	n.a.

(*a*) Estimated. (*b*) *See* South Australia.

Overseas trade in horses

Exports of Australian-bred horses in 1967–68 numbered 845, valued at $1,733,000, made up of horses for breeding (137 valued at $304,000), horses for racing (494 valued at $1,310,000, shipped principally to Singapore, Republic of Korea and the United States of America), and horses for other purposes (214 valued at $119,000). Horses imported into Australia in 1967–68 (820 valued at $2,741,000) were mainly from New Zealand and the United Kingdom.

Pastoral products: wool

With about one-sixth of the world's woolled sheep, Australia produces almost one-third of the world's wool and more than half the world's fine-quality Merino wool. The bulk of the production is exported, mainly as greasy wool, although substantial amounts of scoured and carbonised wool, wool on sheep skins and small quantities of semi-manufactured wool are also shipped. The important position held by Australia among the principal sheep and wool producing countries of the world is shown in the table on page 896.

Wool marketing

Details of past wool marketing schemes and agreements, including the 1914–18 War Imperial Purchase Scheme, the British Australian Wool Realization Association Ltd, the 1939–45 War Acquisition Scheme, Joint Organization, and Minimum Reserve Price Plan, are given in previous issues of the Year Book.

More than ninety per cent of the Australian wool clip is disposed of at auction. (During both world wars, however, auction selling was suspended and replaced by bulk purchase schemes.) There are fourteen recognised wool-selling centres, namely Sydney, Goulburn, Newcastle, Albury, Melbourne, Geelong, Ballarat, Portland, Brisbane, Adelaide, Perth, Albany, Hobart, and Launceston. At these centres wool-selling brokers operate large stores where wool received from growers is held awaiting sale.

Each year a wool-selling programme is drawn up jointly by the selling brokers and wool-buyers on the basis of the expected clip. Selling dates and the quantities to be offered are then determined for each centre. Before each sale the selling brokers, who act as agents for the wool-growers, display a representative portion of the wool to be sold on show floors for buyers' inspection and valuation. Auction sales are attended by buyers purchasing on behalf of wool users in more than fifty countries.

Wool Marketing Committee of Enquiry

In 1961 the Commonwealth Government appointed an independent committee to inquire into the marketing and promotion of Australian wool and related matters (*see* Year Book No. 48, page 977, for further details). The Committee presented its report to the Government in 1962. Its most important recommendation was that wool promotion, research and testing should be brought under the control of a single body, which should also act as an advisory authority on wool marketing. This recommendation was implemented under the *Wool Industry Act* 1962–1967 which set up the Australian Wool Board.

Australian Wool Board

This Board consists of a chairman, six woolgrower representatives, three members with special qualifications, and a representative of the Commonwealth Government. The first chairman of the

Board was appointed by the Minister for Primary Industry after consultation with the Australian Wool Industry Conference (*see* below), but subsequent chairmen are to be appointed on the nomination of the Board. The six woolgrower representatives are appointed by the Minister on the nomination of the Wool Industry Conference, and the three members with special qualifications are appointed from a panel of names submitted by the Conference. The Act provides that the latter members must be experienced in one of the following fields: wool marketing and manufacturing, research, finance, and commerce.

When the Board came into being on 1 May 1963 it took over the functions of the Australian Wool Bureau. On 1 July 1963 the Australian Wool Testing Authority became part of the Board, and on 1 January 1964 the Board took over the functions of the Wool Research Committee. Information on these three former instrumentalities appears in Year Book No. 48, pages 977–81.

Following the organisational changes carried out under the Wool Industry Act, the functions of the Board embrace the following activities.

Wool promotion in Australia and overseas by publicity and other means. Promotion overseas is carried out through the International Wool Secretariat, which is maintained jointly by the Wool Boards of Australia, New Zealand and South Africa.

Provision of a testing service for wool and wool products. This service is administered by a subsidiary board retaining the name Australian Wool Testing Authority.

Administration of wool research. The Board is responsible for preparing annual programmes of research expenditure which are subject to the approval of the Minister for Primary Industry. Two committees established by the Board, the Wool Production Research Advisory Committee and the Wool Textile Research Advisory Committee, assist in this task.

Investigation into all aspects of wool marketing on a continuing basis. The Wool Marketing Committee, an ancillary body appointed by the Board, assists in carrying out this function. The Board is required to report to the Australian Wool Industry Conference on its findings and advise it on measures which should be adopted to meet changing marketing conditions. However, the Board has no executive powers over marketing.

In July 1964 the Board, after an investigation by the Wool Marketing Committee, made recommendations to the Australian Wool Industry Conference for the introduction of a Reserve Price Plan for wool, which were put to woolgrowers in a referendum in December 1965. However, the plan was rejected by 53.4 per cent of the enfranchised woolgrowers who voted. For details *see* Year Book No. 52, page 945.

Following the rejection of the Reserve Price Plan at this referendum, the Board continued with its investigations and on 31 October 1967 presented its second report on wool marketing to the Australian Wool Industry Conference. The report included proposals for the establishment of an Australian Wool Marketing Authority to enforce standards of clip preparation, administer the elimination of one, two, and three bale lots, conduct a price averaging plan for these wools and others voluntarily submitted, and conduct, in conjunction with wool selling brokers, a system of supply management involving chiefly wools in the price averaging plan. The report also recommended a system of financial advances for woolgrowers and the establishment of an organisation of woolgrowers, brokers, and buyers to conduct and control the sale of wool at auction.

A further recommendation that these proposals, with some amendments, be implemented by a non-statutory Australian Wool Marketing Corporation was accepted by the Australian Wool Industry Conference in November 1968. The Conference asked the Board to take all further steps necessary to set up such a Corporation.

Maintenance and administration of the wool stores which were entrusted to the Board by the Commonwealth Government. Further details concerning these stores appear in Year Book No. 48, page 978.

Other activities approved by the Minister for the benefit of the wool industry, including the operation of the Wool Statistical Service and the registration of wool classers. The Wool Statistical Service (described in more detail in Year Book No. 48, pages 977–8) provides comprehensive statistics on the Australian wool clip, while the registration of wool classers is designed to improve the standards of wool classing in Australia.

At present the main sources of finance for the various activities of the Board are a levy paid by woolgrowers and contributions by the Commonwealth Government.

The Australian Wool Industry Conference

This body was formed by woolgrowers in October 1962 to meet the need for an organisation with sufficient authority to speak on behalf of the woolgrowing industry as a whole. It is not a statutory body and consists of twenty-five members each from the Australian Woolgrowers' and Graziers'

Council and the Australian Wool and Meat Producers' Federation, and, from October 1965, five members from the Australian Primary Producers' Union. The fifty-five member conference is presided over by an independent chairman.

The Conference makes recommendations to the Commonwealth Government on policy matters concerning the wool industry. Under the Wool Industry Act it is the responsibility of the Conference to nominate woolgrower representatives for appointment to the Australian Wool Board and to prepare panels of names from which the three Board members with special qualifications are selected. Under the Wool Tax Acts (*see* below) the Conference is also responsible for recommending to the Commonwealth Government what rates of levy should be paid by woolgrowers to finance the activities of the Wool Board and the wool research programme.

Wool levy

Since 1936 a statutory levy has been collected from woolgrowers to finance wool promotion activities. The initial rate of 5c a bale was increased at the request of woolgrowers to 20c a bale in 1945 and 40c a bale in 1952, the latter rate continuing until 1960. Further details regarding the operation of this levy prior to 1957 appear in Year Book No. 48, page 978.

Under legislation passed in 1957 provision was also made for the payment by woolgrowers of a contribution for wool research which was fixed at 20c a bale. In 1960 the wool promotion levy was raised to 50c a bale, and the following year it was increased further to $1 a bale. The operation of this rate was subsequently extended for 1962–63 and 1963–64.

On 1 July 1964 the basis for collecting the woolgrowers' combined levy for wool promotion and research was changed from a flat rate per bale to a percentage deduction from the gross value of shorn wool sold. A maximum rate of 2 per cent was fixed, but provision was made for a lower rate to be prescribed, if appropriate. For 1964–65 the rate was set at 1.875 per cent, which involved a substantial increase in payments by woolgrowers for promotion (from $1 per bale to the equivalent of about $2.70 per bale), while the research component of the levy was left unaltered at 20c per bale. In 1965–66 the levy was set at 2 per cent and it remained at the maximum rate for 1966–67, 1967–68 and 1968–69.

The imposition and collection of the combined levy from woolgrowers is governed by six complementary Acts, the Wool Tax Acts (Nos 1 to 5) 1964 and the *Wool Tax Administration Act* 1964–1966.

Commonwealth Government's contributions to wool research and promotion

In 1945 the Commonwealth Government commenced contributing on a statutory basis to wool research. Initially the contribution was at the rate of 20c a bale, but this was doubled in 1957 to 40c a bale. At this rate the Commonwealth Government contributed about $2,000,000 to wool research in 1965–66, and a similar sum was provided in 1966–67.

Prior to 1964–65 the Commonwealth Government had not contributed to wool promotion. However, following representations made by the Australian Wool Industry Conference, the Commonwealth Government undertook to provide assistance to the Australian Wool Board in financing its commitment to the greatly expanded wool promotion programme of the International Wool Secretariat. The expanded wool promotion programme, announced by the Secretariat, envisaged an increase in the Wool Board's annual contribution to overseas wool promotion campaigns from the then level of $5,000,000 to about $20,000,000.

From 1 July 1964 the Commonwealth Government agreed to match on a $1 for $1 basis any increase in contributions by woolgrowers for wool promotion in excess of the levy of $1 a bale then in force, and the Wool Industry Conference agreed to increase the growers' levy to the equivalent of about $2.70 a bale, which resulted in a Commonwealth commitment of about $1.70 a bale. In aggregate this commitment entailed a Commonwealth contribution for promotion of about $8,500,000 a year. This arrangement operated until 30 June 1967.

During 1967 the Wool Industry Act was amended following negotiations between the Executive of the Australian Wool Industry Conference and the Government. The amendment provided for a Government contribution for wool research and promotion during the three years 1967–68 to 1969–70 on a $1 for $1 basis matching woolgrowers' contribution by levy, to a maximum of $14,000,000 in any one year. It provided for the grower levy and the Government grant to be apportioned annually between wool research and promotion by the Minister for Primary Industry after considering the recommendations of the Australian Wool Industry Conference. No change occurred in the legislation providing for the payment by woolgrowers of a levy at a rate not exceeding two per cent per annum.

Wool production

Wool as shorn from the sheep contains an appreciable amount of grease, dirt and other extraneous matter, and is termed 'greasy wool'. The quantity of grease and other matter in a fleece differs not only between countries, but between districts in the same country. It fluctuates with the vagaries of the season, and with the breed and the condition of the sheep. To allow for this factor, the weight of greasy wool is sometimes given on a 'clean' basis, i.e. minus the estimated amount of impurities. The net wool fibre content of greasy wool, expressed as a percentage, is termed 'clean yield'.

From 1946–47 to 1952–53 the Australian Wool Realisation Commission, and from 1953–54, the Wool Statistical Service, have assessed annually the clean yield of the Australian wool clip. During the period of assessment the clean yield showed a continuous rise up to 1951–52, when it reached 57.5 per cent. It has since fluctuated between 55.7 per cent and 57.7 per cent. It was 56.1 per cent in 1967–68.

Wool scoured, washed and carbonised in Australia before export, however, has a clean yield somewhat lower than for the whole clip, because the grade of greasy wool treated locally for export as scoured, washed or carbonised contains quantities of dirty and low-grade wool. The quantity of scoured wool exports during 1967–68 was about 9 per cent of the total raw wool exports (excluding wool exported on skins) in terms of greasy. For the clean yield of Australian scoured wools exported a standard factor of 93 per cent is taken.

The production of wool in the States and Territories varies broadly in accordance with the number of sheep depastured and with seasonal conditions which affect clip per head (*see* page 891). In general, however, South Australia obtains from its large-framed Merinos a much heavier fleece per sheep than the Australian average. In addition, as a result of better management (improved pastures, fodder conservation, better breeding, control of diseases, etc.), the long-term trend has been towards higher fleece weights.

The following table shows details of total wool (i.e. shorn, dead and fellmongered, and exported on skins) produced by each of the States and Territories during the years 1963–64 to 1967–68 compared with averages for the three-year periods ended 1938–39, 1948–49 and 1958–59. A graph showing the production of wool in relation to sheep numbers from 1870 onwards appears on plate 43 following.

PRODUCTION OF WOOL (GREASY BASIS): STATES AND TERRITORIES, 1936-37 TO 1967-68

('000 lb)

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Average for three years ended—									
1938–39 . .	478,595	169,256	169,325	88,699	73,141	15,728	35	1,822	996,601
1948–49 . .	439,363	200,229	151,679	108,126	95,031	16,272	305	1,927	1,012,932
1958–59 . .	633,938	298,302	217,062	187,225	160,402	30,141	277	2,371	1,529,718
Year—									
1963–64 . .	731,316	334,288	255,386	210,500	216,574	34,007	91	2,552	1,784,714
1964–65 . .	706,061	361,530	251,426	215,736	207,035	39,671	89	2,475	1,784,023
1965–66 . .	579,475	366,943	192,773	232,296	247,530	41,858	88	1,873	1,662,836
1966–67 . .	622,745	378,457	203,664	239,202	272,575	43,153	88	2,454	1,762,338
1967–68 . .	650,420	332,427	226,822	218,951	300,410	38,308	112	2,238	1,769,688

The bulk of the Australian wool production (about 91 per cent in recent years) is shorn from live sheep. The remainder is obtained by fellmongering (less than 1.5 per cent) or is exported on skins (about 8 per cent). The following table shows details of total wool production according to method of obtaining wool, and also the gross value of wool produced. Gross value is based, for shorn wool, upon the average price realised for greasy wool sold at auction and, for skin wools, on prices recorded by fellmongers and skin exporters.

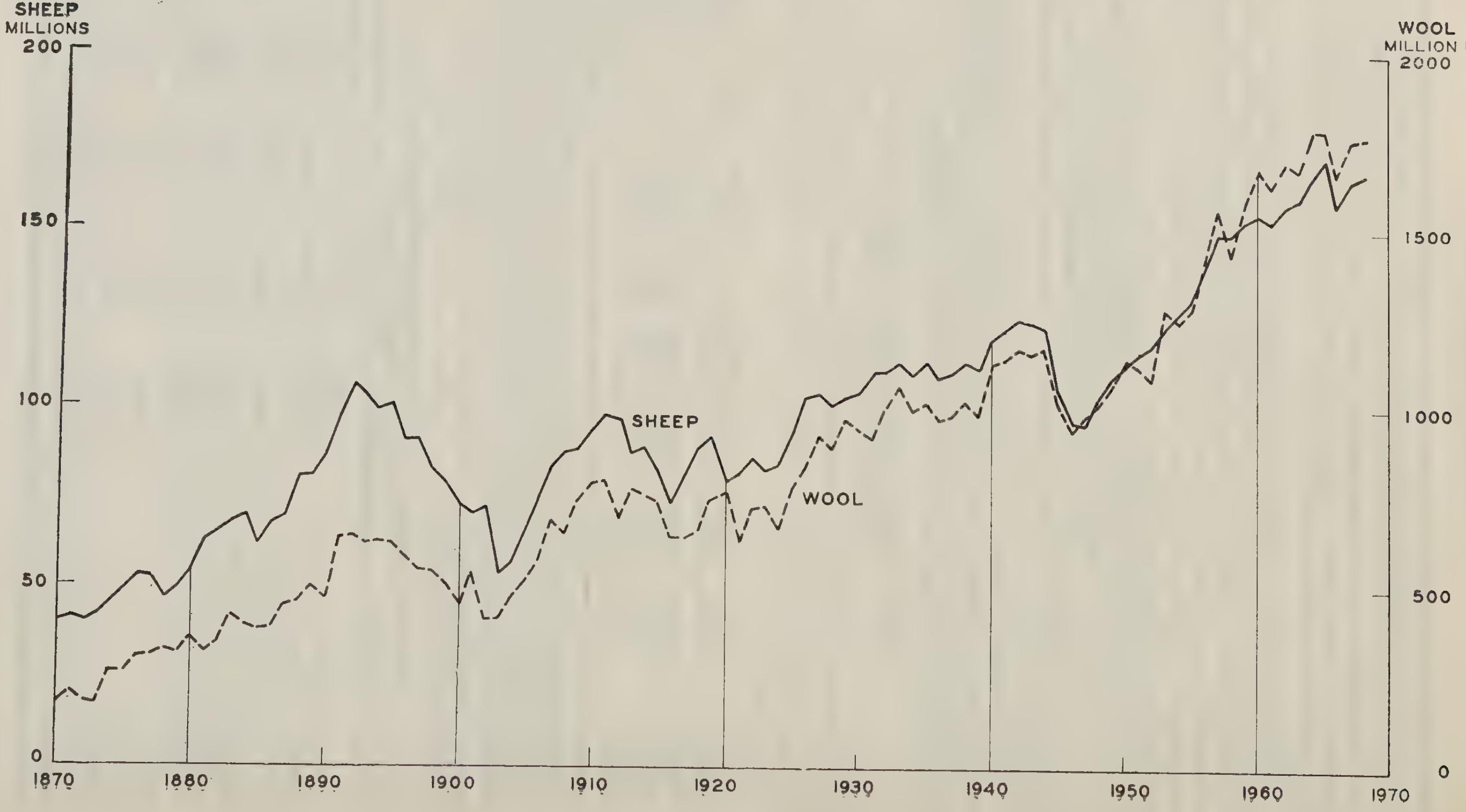
QUANTITY (GREASY BASIS) AND VALUE OF WOOL PRODUCED AUSTRALIA, 1936-37 TO 1967-68

Period	*Shorn (including crutchings)*	*Dead and fell-mongered*	*Exported on skins*	*Total production*	
				Quantity	*Value*
	'000 lb	'000 lb	'000 lb	'000 lb	$'000
Average for three years ended—					
1938–39	889,338	49,280	57,983	996,601	106,850
1948–49	902,007	50,660	60,265	1,012,932	305,072
1958–59	1,411,424	36,804	81,490	1,529,718	788,290
Year—					
1963–64	1,631,962	28,688	124,064	1,784,714	1,023,442
1964–65	1,629,412	26,865	127,746	1,784,023	840,552
1965–66	1,503,457	24,411	134,968	1,662,836	808,437
1966–67	1,602,229	24,841	135,269	1,762,338	812,230
1967–68	1,605,056	24,125	140,507	1,769,688	709,524

PLATE 43

SHEEP NUMBERS AND WOOL PRODUCTION

AUSTRALIA, 1870 TO 1968



Average fleece weight

AVERAGE WEIGHT OF FLEECES SHORN (SHEEP AND LAMBS) STATES AND TERRITORIES, 1963-64 TO 1967-68

(lb)

State or Territory	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
		SHEEP			
New South Wales	10.19	9.81	8.65	10.01	9.87
Victoria	10.09	10.08	9.63	9.90	9.08
Queensland	10.41	9.65	8.79	9.94	10.62
South Australia	12.89	12.49	12.72	12.75	12.25
Western Australia	11.46	10.06	10.74	10.67	10.57
Tasmania	9.14	10.64	10.34	10.22	8.62
Northern Territory	10.36	9.26	8.13	8.13	10.89
Australian Capital Territory	9.59	9.07	7.33	9.81	8.67
Australia	**10.60**	**10.15**	**9.63**	**10.39**	**10.14**
		LAMBS			
New South Wales	3.39	3.34	2.99	3.21	3.16
Victoria	2.76	2.97	2.72	2.90	2.56
Queensland	3.99	3.78	3.56	3.55	4.10
South Australia	3.71	3.79	3.73	3.90	3.38
Western Australia	2.91	2.69	2.90	2.98	2.97
Tasmania	2.12	2.31	2.48	2.54	2.28
Northern Territory	4.34	3.88	3.00	3.00	. .
Australian Capital Territory	1.61	1.93	1.82	1.64	1.65
Australia	**3.26**	**3.24**	**3.03**	**3.19**	**3.09**

Classification of wool according to quality

The following table provides a detailed analysis of wool sold at auction, according to quality, for the years 1963–64 to 1967–68. These data are compiled by the Wool Statistical Service on the basis of catalogues of auction sales. 'Quality' ('64's, 60's, 58's,' etc.) is a measure of the fineness and texture of wool for spinning purposes. Broadly, it means the maximum number of hanks of yarn, each of 560 yards length, which can be spun from 1 lb of combed wool. For instance, wool of 64's quality is of a fineness and texture which will produce 64 hanks, each of 560 yards, from 1 lb of tops (combed wool) of that particular wool.

CLASSIFICATION OF GREASY WOOL SOLD AT AUCTION(*a*): AUSTRALIA 1963-64 TO 1967-68

(Bales of approximately 300 lb)

Predominating quality	*1963–64*		*1964–65*		*1965–66*		*1966–67*		*1967–68*	
	Quantity	*Per cent*	*Quantity*	*Per cent*	*Quantity*	*Per cent*	*Quantity*	*Per cent*	*Quantity*	*Per cent*
70's and finer	132,620	2.7	145,267	2.9	149,305	3.3	114,406	2.4	131,939	2.7
64/70's	373,658	7.6	409,279	8.2	402,134	8.8	292,158	6.2	270,039	5.6
64's	567,559	11.6	620,453	12.5	576,499	12.7	470,153	9.9	468,436	9.7
64/60's	482,770	9.9	486,575	9.7	373,796	8.2	403,917	8.5	427,884	8.8
60/64's	1,149,957	23.4	1,108,668	22.2	896,070	19.7	1,002.088	21.1	1,089,866	22.4
60's and 60/58's	964,274	19.7	930,821	18.7	900,760	19.8	1,016,979	21.5	1,073,517	22.1
Total, 60's and finer	*3,670,838*	*74.9*	*3,701,063*	*74.2*	*3,298,564*	*72.5*	*3,299,701*	*69.6*	*3,461,681*	*71.3*
58's	566,904	11.6	586,708	11.8	591,790	13.0	660,570	13.9	623,043	12.8
56's	382,384	7.8	406,878	8.2	386,169	8.5	461,182	9.7	433,505	8.9
50's	141,638	2.9	153,079	3.1	133,574	2.9	178,587	3.8	173,313	3.6
Below 50's	45,675	0.9	51,534	1.0	44,887	1.0	61,289	1.3	59,401	1.2
Oddments	92,622	1.9	82,742	1.7	94,268	2.1	81,725	1.7	104,738	2.2
Grand total	**4,900,061**	**100.0**	**4,982,004**	**100.0**	**4,549,252**	**100.0**	**4,743,054**	**100.0**	**4,855,681**	**100.0**

(*a*) All greasy wool sold at auction except 'wool re-offered account buyer'.

Price and value

During 1967–68 the price of greasy wool sold in the selling centres of Australia averaged 41.8c per lb compared with the average price of 47.4c per lb in 1966–67 and 50.1c per lb in 1965–66. These prices are as compiled by the National Council of Wool Selling Brokers and represent the average price realised for all greasy wool, of whatever type or quality, marketed during the years indicated.

Fluctuation in Australian wool prices has a marked effect on the nation's rural and national income. In 1945–46 the gross value of wool production was $117,194,000, representing 17.4 per cent of the gross value of production of all rural industries, while in 1950–51, when prices reached a peak, wool was valued at $1,303,804,000 or 55.6 per cent of the total value of production for all rural industries. The value of wool production fluctuated considerably in subsequent years. In 1967–68 it was $709,524,000, 21.2 per cent of the gross value of production of rural industries.

ESTIMATED GROSS VALUE OF TOTAL WOOL PRODUCTION(*a*)
STATES AND TERRITORIES, 1963-64 TO 1967-68
($'000)

Season	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1963–64	416,834	208,700	141,458	113,410	119,862	21,352	50	1,776	1,023,442
1964–65	336,675	176,041	117,218	94,328	95,804	19,051	39	1,396	840,552
1965–66	278,295	193,797	90,961	103,638	118,198	22,405	41	1,105	808,437
1966–67	286,293	180,946	93,190	104,588	124,821	20,983	39	1,370	812,230
1967–68	265,527	133,213	94,874	79,925	119,146	15,609	41	1,189	709,524

(*a*) Includes shorn, dead and fellmongered wool and wool exported on skins.

Stocks of wool

Stocks of raw wool held in Australia at 30 June 1968 amounted to 266.6 million lb (greasy basis) of which 61.1 million lb (38.1 million lb as greasy and 23.0 million lb as scoured and carbonised) was held by woollen mills, wool scourers and fellmongers, and 205.5 million lb, assumed to be all greasy, was held by brokers. Of the wool held by brokers, 59.9 million lb was unsold wool and 145.6 million lb was sold wool held awaiting shipment. These stocks exclude wool on skins, since this wool is not recorded as production until fellmongered in Australia or exported on skins.

Consumption of wool

Statistics of raw wool consumption published in recent years for the purposes of broad international comparisons are based on the quantities of scoured or carbonised wool used on the woollen and worsted systems (mill consumption), plus quantities used in such processes as felting. Consumption estimates compiled on this basis have obvious defects, as they disregard overseas trade in semi-processed wool (e.g. tops and yarns) as well as woollen goods. Estimates of raw wool used on the woollen and worsted systems and by felt manufacturers in Australia are shown in the following table for the years 1963–64 to 1967–68.

Some additional information on wool scouring activities has become available from 1964–65. Greasy, scoured, and clean equivalent factors derived from this source have therefore been calculated on a slightly different basis from that previously used. For this reason details from 1964–65 appearing below may not be strictly comparable with figures for earlier years.

ESTIMATED CONSUMPTION OF RAW WOOL: AUSTRALIA, 1963-64 TO 1967-68
('000 lb)

Year	*Greasy basis*			*Clean equivalent*		
	Used on woollen and worsted systems	*Used for felt manufacture (including hats)*	*Total*	*Used on woollen and worsted systems*	*Used for felt manufacture (including hats)*	*Total*
1963–64	124,591	3,568	128,159	74,441	1,695	76,136
1964–65(*a*)	121,621	2,826	124,447	71,764	1,342	73,106
1965–66(*a*)	126,119	1,990	128,109	74,418	945	75,363
1966–67(*a*)	116,860	2,210	119,070	72,089	1,050	73,139
1967–68(*a*)p	115,486	1,532	117,018	71,241	728	71,969

(*a*) Particulars for 1964–65 and later years may not be strictly comparable with figures for earlier periods; *see* text above.

As considerable quantities of tops, noils and yarn are exported from Australia, the series on raw wool consumption shown on page 892 is over-stated to this extent. The series 'Estimated consumption of processed wool in Australia' provides a more reliable indication of wool consumption in Australia, as allowance has been made for exports of wool in semi-processed form. This series is shown in the following table for the years 1963–64 to 1967–68. Briefly, the series measures consumption of wool in terms of yarn used in Australian mills and other factories to produce woollen cloth and other woollen goods, yarn used for hand knitting purposes, and scoured wool used for felt manufacture. No allowance has been made for overseas trade in woollen piece goods, clothing, etc., because of the obvious difficulties of estimating accurately the wool content of these products. For the reasons stated in the preceding paragraph, details from 1964–65 appearing below may not be strictly comparable with figures for earlier years.

ESTIMATED CONSUMPTION OF PROCESSED WOOL: AUSTRALIA 1963-64 TO 1967-68

('000 lb)

	Greasy basis				*Clean equivalent*			
Year	*Worsted yarn used (a)(b)*	*Woollen yarn used (b)*	*Scoured wool used for felt manufacture (including hats)*	*Total*	*Worsted yarn used (a)(b)*	*Woollen yarn used (b)*	*Scoured wool used for felt manufacture (including hats)*	*Total*
1963–64	45,733	31,061	3,568	80,362	26,686	19,150	1,695	47,531
1964–65(*c*)	47,172	40,575	2,826	90,573	27,233	24,408	1,342	52,983
1965–66(*c*)	47,426	34,107	1,990	83,523	27,496	20,829	945	49,270
1966–67(*c*)	42,120	37,662	2,210	81,992	25,490	24,143	1,050	50,683
1967–68(*c*) p	36,879	40,785	1,532	79,196	22,316	26,144	728	49,188

(*a*) Includes hand knitting yarns used. (*b*) Includes wool content of yarns containing a mixture of wool and other fibres. (*c*) Particulars for 1964–65 and later years may not be strictly comparable with figures for earlier periods; *see* text on page 892.

Quantities of wool exported

Of the total shipments of greasy and slipe wool in 1967–68, 36 per cent went to Japan, 10 per cent to the United Kingdom, 9 per cent to Italy, 9 per cent to France and 7 per cent each to the Federal Republic of Germany and Belgium-Luxembourg.

EXPORTS OF GREASY AND SLIPE WOOL: AUSTRALIA, 1963-64 TO 1967-68

('000 lb actual weight)

Country of consignment	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Japan	433,944	424,175	467,587	492,456	498,087
United Kingdom	229,308	192,961	133,696	145,828	143,593
Italy	127,556	95,175	137,405	151,749	123,116
France	138,795	122,283	130,903	106,208	120,641
Germany, Federal Republic of	86,350	85,944	91,006	71,170	100,823
Belgium-Luxembourg	101,699	106,391	88,802	98,546	95,934
United States of America	27,590	67,093	72,720	55,721	60,165
U.S.S.R.	45,595	50,681	29,542	29,205	46,147
Poland	22,600	22,983	28,441	30,651	35,536
Mexico	19,085	28,065	21,747	22,145	23,944
India	12,908	18,858	9,241	29,583	21,562
Other	137,368	121,790	113,249	134,639	124,840
Total	**1,382,801**	**1,336,399**	**1,324,339**	**1,367,901**	**1,394,388**

EXPORTS OF SCOURED AND WASHED, AND CARBONISED WOOL AUSTRALIA, 1963–64 TO 1967–68

('000 lb actual weight)

Country of consignment	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
United Kingdom	17,566	12,812	14,521	16,850	18,931
United States of America . .	23,063	27,834	27,671	16,180	18,377
Italy	8,340	6,292	7,928	8,048	8,708
Germany, Federal Republic of .	7,517	8,997	7,531	7,100	8,648
Canada	3,398	4,966	2,925	3,767	5,087
Iran	2,428	3,513	4,668	4,650	4,729
Japan	4,891	4,122	5,594	4,215	3,952
U.S.S.R.	. .	. .	. .	2,472	3,675
Hong Kong	1,435	792	2,439	2,816	2,689
France	3,205	3,268	2,877	2,920	2,443
Korea, Republic of . . .	163	253	155	1,025	1,823
Belgium-Luxembourg . . .	1,413	2,466	1,703	1,325	1,648
Other	14,798	12,138	10,751	8,502	9,327
Total	**88,217**	**87,453**	**88,763**	**79,870**	**90,037**

EXPORTS OF CARDED OR COMBED WOOL, NOILS AND WOOLWASTE AUSTRALIA, 1963–64 TO 1967–68

('000 lb actual weight)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Carded or combed—Tops . .	25,932	19,232	22,909	23,975	22,617
Other . .	177	17	175	. .	. .
Noils	5,006	4,066	3,734	4,114	3,886
Waste—Soft wool	2,661	2,393	2,734	2,585	2,875
Hard wool . . .	3,448	2,595	2,891		

The following table shows the estimated greasy and clean weights of exports of raw and semi-processed wool for the years 1963–64 to 1967–68. As the figures in the following table are in terms of 'greasy' or 'clean' basis, they differ from those in the preceding tables which represent actual weight shipped.

By reason of the availability, from 1964–65, of additional information on wool scouring activities, to which reference has already been made (*see* page 892), greasy equivalents of scoured and carbonised exports calculated from these data for 1964–65 and later years may not be strictly comparable with figures for earlier periods.

EXPORTS OF WOOL—GREASY AND CLEAN BASES: AUSTRALIA 1963–64 TO 1967–68

('000 lb)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68p*
	GREASY BASIS				
Raw wool—					
Greasy and slipe	1,383,271	1,336,920	1,324,763	1,368,237	1,395,405
Scoured and washed and carbonised	162,272	(*a*)140,617	(*a*)141,780	(*a*)122,124	(*a*)137,671
Exported on skins . . .	124,064	127,746	134,968	135,269	140,507
Total raw wool . . .	*1,669,607*	*1,605,283*	*1,601,511*	*1,625,630*	*1,673,583*
Semi-processed wool—					
Tops	46,445	34,041	43,069	42,513	39,806
Yarn	707	354	530	263	240
Total raw and semi-processed wool	**1,716,759**	**1,639,678**	**1,645,110**	**1,668,406**	**1,713,629**

(*a*) May not be strictly comparable with figures for years earlier than 1964–65; *see* text on page 892.

EXPORTS OF WOOL—GREASY AND CLEAN BASES: AUSTRALIA
1963–64 TO 1967–68—*continued*
('000 lb)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68p*
CLEAN EQUIVALENT					
Raw wool	969,007	935,755	926,812	951,373	967,577
Semi-processed wool	27,389	19,819	25,274	25,754	24,111
Total	**996,396**	**955,574**	**952,086**	**977,127**	**991,688**

Value of wool exported

The value of wool (other than wool on sheepskins) exported from Australia during 1967–68 was 24 per cent of the total value of exports of merchandise of Australian origin, while the proportion for the five years ended 1967–68 averaged 29 per cent. The value for the five years ended 1967–68, together with the principal countries to which wool was exported, is shown in the following table.

VALUE OF WOOL EXPORTS: AUSTRALIA(*a*), 1963-64 TO 1967-68
($'000)

Country of consignment	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Japan	282,172	242,549	259,731	274,321	245,882
United Kingdom	153,528	110,015	79,857	85,214	71,846
Italy	84,014	54,515	76,630	82,229	60,182
France	83,134	61,799	64,990	53,554	49,430
United States of America	41,240	62,233	68,749	50,611	47,058
Germany, Federal Republic of	55,830	50,179	51,174	40,552	46,517
Belgium-Luxembourg	48,268	42,664	34,059	39,822	32,712
U.S.S.R.	33,990	31,681	18,588	20,305	27,368
Other	178,704	150,215	131,066	159,843	134,736
Total	**960,880**	**805,850**	**784,844**	**806,451**	**715,731**

(*a*) Excludes wool exported on sheepskins.

World sheep numbers and wool production

The following table shows particulars of the woolled sheep numbers and total production of wool, in terms of greasy, in the principal wool-producing countries of the world, together with estimates of world production of Merino, crossbred, and carpet type wool for the latest available years.

In 1967–68 Australia produced 30 per cent of the world total of all types of wool. Other principal wool producers were New Zealand with 12 per cent of the world total, Argentina, 7 per cent, South Africa, 5 per cent, and United States of America, 4 per cent. Production in the U.S.S.R., China, and eastern European countries together amounted to 21 per cent.

Australia's wool clip is predominantly Merino. New Zealand and Argentina produce mainly crossbred wool, while the clip of the U.S.S.R. is largely of the carpet type.

ESTIMATED WORLD WOOLLED SHEEP NUMBERS AND PRODUCTION OF WOOL, 1965-66 TO 1967-68

(*Source* for countries other than Australia: Reports published by the Commonwealth Secretariat, London)

Country	Sheep numbers (million)			Wool production (million lb—greasy basis)		
	1965–66	*1966–67*	*1967–68(a)*	*1965–66*	*1966–67*	*1967–68*
Australia	**158**	**164**	**167**	**1,663**	**1,762**	**1,770**
New Zealand	57	60	61	695	709	728
Argentina	49	49	49	430	441	428
South Africa	37	37	36	329	292	307
United States of America	25	24	22	241	236	227
Uruguay	22	22	22	183	178	186
United Kingdom	30	29	28	129	131	128
U.S.S.R., China, eastern Europe(*b*)	236	242	245	1,138	1,178	1,238
Other	317	318	318	921	923	923
World total	**931**	**945**	**948**	**5,729**	**5,850**	**5,935**
Type of wool—						
Apparel type—						
Merino				2,264	2,311	2,348
Crossbred				2,229	2,270	2,297
Carpet type				1,236	1,269	1,290

(*a*) Provisional. (*b*) This group comprises Albania, Bulgaria, China and Dependencies, Czechoslovakia, East Germany, Hungary, Outer Mongolia, Poland, Romania, Tibet, and U.S.S.R.

Principal importing countries and sources of supply

The following table, prepared from information published by the Commonwealth Secretariat, furnishes, in respect of the principal importing countries, details of their imports of wool for 1967 together with the chief sources of supply. The quantities imported refer to the actual weight of wool, without distinguishing between greasy and scoured, except in the case of the United States of America, where estimated clean content of raw wool is quoted.

PRINCIPAL WOOL IMPORTING COUNTRIES AND SOURCES OF SUPPLY, 1967

(*Source:* Information published by the Commonwealth Secretariat, London)

(Million lb)

Importing country	Quantity imported from(a)—					
	Australia	*New Zealand*	*Argentina*	*South Africa*	*Other countries*	*Total imports*
United Kingdom	171.3	110.0	53.3	36.4	146.3	517.3
Japan	481.7	38.7	26.3	40.8	9.4	596.9
France	130.7	60.8	22.8	45.3	16.4	276.0
Italy	134.3	22.7	19.7	32.5	48.1	257.3
Belgium	99.0	24.5	16.8	0.2	41.7	182.0
Germany, Federal Republic of	76.6	22.3	12.5	30.1	40.2	181.7
United States of America(*b*)	55.5	49.8	34.3	15.5	31.9	187.0

(*a*) Actual weight of greasy and scoured wool. (*b*) Imports are in terms of estimated clean content of greasy and scoured wool. Actual weight of total United States of America imports was 249.5 million lb.

As a considerable transit trade exists between European countries, it must not be assumed that the whole of the imports recorded by these countries is retained for their own consumption. The countries chiefly concerned with the transit trade are the United Kingdom and Belgium.

Pastoral products: meat

Australian Meat Board

The Australian Meat Board, which was re-constituted under the *Meat Industry Act* 1964–1966, is the body responsible for controlling the external marketing of Australian beef, mutton and lamb. Powers and membership of the Board prior to its re-constitution in 1964 are set out on page 801 of

Year Book No. 40. The Board's primary function is to ensure that Australian meat exports are marketed in a manner which will safeguard the long-term interests of the Australian meat industry. It consists of five members representing meat producers, two representing meat exporters, one representing the Commonwealth Government, and an independent Chairman.

The Board regulates overseas marketing of Australian meat by means of an export licensing system. It has power of control over the kinds of meat that may be exported by licensed exporters to particular places, or to particular agents and respresentatives. The Board also has power to undertake measures to promote the sale and consumption of meat both in Australia and overseas, and it may purchase and sell meat in its own right for the purpose of market development. However, the exercise of this power is limited to activities aimed at meeting special marketing problems or circumstances which preclude the effective participation of private traders. The Board may also purchase and sell meat, with the approval of the Minister for Primary Industry, for the purpose of administering any international arrangements to which Australia may be a party.

Meat research schemes

In November 1965 the Commonwealth Parliament passed legislation providing for the extension of the cattle and beef research scheme to cover beef, mutton and lamb research. Details of the beef research scheme were set out on page 1050 of Year Book No. 51. Under the new legislation the Cattle and Beef Research Committee was re-constituted as the Meat Research Committee, its powers and functions being similar to those of the former Committee extended to include mutton and lamb research. The Meat Research Committee consists of twelve members—seven meat producer representatives, the Chairman of the Australian Meat Board (Chairman), one representative from the universities engaged in meat research, the Commonwealth Scientific and Industrial Research Organization, the Australian Agricultural Council, and the Department of Primary Industry. The new Committee came into being in March 1966 and the Cattle and Beef Research Committee ceased to exist from that date.

The scheme is financed from the Livestock Slaughter Levy (*see* below). The Commonwealth makes a matching contribution on a $1 for $1 basis to meet expenditure on research. The research is conducted by such bodies as the universities, C.S.I.R.O., State Departments of Agriculture and the Bureau of Agricultural Economics.

The Minister for Primary Industry has approved a beef research programme of $2,386,000 and a mutton and lamb research programme of $788,500 for 1968–69.

The Livestock Slaughter Levy

The *Livestock Slaughter Levy Act* 1964–1966 imposed a levy on all cattle (over 200 lb dressed weight), sheep and lambs slaughtered within Australia for human consumption. These levies operated from 1 August 1964 and have replaced the charge imposed on meat exports and also subsumed the cattle levy for beef research purposes imposed in 1960 (*see* page 909 of Year Book No. 51). In November 1968 legislation was passed amending the Act to provide for an additional levy to finance service and investigation activities relating to meat processing. The amended legislation (the *Livestock Slaughter Levy Act* 1964–68) now provides three elements in the levy for each class of livestock—an amount to finance meat research; an amount to finance the operations of the Australian Meat Board; and, from 1 January 1969 until 31 December 1971, an amount to finance service and investigation activities relating to meat processing. The first two elements are paid by producers while the third element is paid by meat processors.

Under the Act the total levy may not exceed 75.0c a head for cattle or 7.5c a head for sheep and lambs. The amount levied for research may not exceed 25.0c a head for cattle or 3.3c a head for sheep and lambs while the amount for service and investigation activities relating to meat processing is set for the period of its operation at 1.0c a head for cattle and 0.1c a head for sheep and lambs. The present operative rate for cattle is 33.0c (20.0c for research; 12.0c to the Australian Meat Board; 1.0c for service and investigation) and for sheep and lambs, 3.10c (1.75c for research; 1.25c to the Australian Meat Board; 0.1c for service and investigation).

United Kingdom long-term purchase arrangements

Details of the long-term meat contracts with the United Kingdom from 1939 to 1952 and of the Fifteen Year Meat Agreement (1952–67) are given on page 710 of Year Book No. 41 and in earlier issues. In September 1953 the trade in meat between the United Kingdom and Australia reverted to private traders. The main features of the arrangements were given in Year Book No. 47, page 960. Details of minimum prices operating and deficiency payments received in recent years under private trading appear in Year Book No. 48 (page 973) and No. 50 (page 1068).

On 30 September 1967 the Fifteen Year Meat Agreement expired, and no new agreement has been negotiated. However, Australia still retains guaranteed duty-free entry for meat and a number of tariff preferences in the United Kingdom market under the provisions of the United Kingdom-Australia Trade Agreement.

Lamb Guarantee Scheme

Since the 1962–63 lamb export season the Australian Meat Board has guaranteed exporters a minimum price on all lambs 36 lb and under shipped to the United Kingdom. For the 1962–63 and 1963–64 seasons these prices were set at 15.0c per lb f.o.b. for the period September to November and 13.8c per lb for the following three months. For the 1964–65 and 1965–66 lamb export seasons the corresponding prices were 15.8c per lb and 14.6c per lb. For the 1966–67 season the prices were set at 16.0c per lb and 14.5c per lb, and for 1967–68 and 1968–69, 17.0c per lb and 15.8c per lb. Prices set for the 1969–70 season are 18.0c per lb and 16.5c per lb. The higher guaranteed price for the initial period is aimed at stimulating early shipments of lamb, because normally the most opportune time for selling Australian lamb in the United Kingdom market is early in the export season. Any commitment by the Board is payable from moneys accrued in the Lamb Deficiency Payments Account under the Fifteen Year Meat Agreement.

United States-Australia Meat Agreement

In February 1964 the Governments of Australia and the United States concluded an agreement for the regulation of beef, veal and mutton exports from Australia to the United States with the object of promoting the orderly development of the trade in these classes of meat between the two countries. The agreement sought to preserve approximately the current pattern of trade in beef and mutton and to permit Australia to obtain a reasonable share of the expected market growth. Under the agreement Australia undertook to limit its exports of beef, veal and mutton to the United States to 242,000 tons in 1964. In the succeeding two years (1965 and 1966) exports were permitted to increase at a compound rate of 3.7 per cent. The agreement provides for a triennial review of the growth factor, the first of which was to take place before 1 October 1966, but no review has been held.

In August 1964 the United States Congress passed a Bill providing for the imposition of quotas on imports of beef and veal, mutton and goatmeat from all sources, for 1965 and subsequent years, if imports of these items are estimated by the United States Department of Agriculture to equal or exceed 110 per cent of a basic quantity. The basic quantity, 323,840 tons, is approximately the average of imports from 1959 to 1963. This quantity may be increased or decreased in any future calendar year by a percentage equal to that by which the United States average annual commercial production of beef and veal, mutton and goatmeat has changed since the base period 1959–1963. For this purpose the level of domestic production is the average of estimated commercial production for the year in which quotas may be applied and the two preceding years. An increase of 36.2 per cent in the basic quantity was set for 1969, providing for allowable imports of approximately 441,100 tons (424,200 tons in 1968) and an import ceiling, at which quotas would be established, of about 485,200 tons (466,600 tons in 1968). (Figures for earlier years are given in previous issues of the Year Book.) On the basis of the first official estimate of United States meat imports during 1969 the United States Secretary for Agriculture announced on 2 January 1969 that it would not be necessary to invoke meat import quotas for 1969 as supplying countries had agreed to restrain shipments to 462,100 tons—23,100 tons below the point at which quotas would become operative. However, if a later quarterly estimate in 1969 indicated that the import ceiling would be equalled or exceeded, then quotas would be imposed. Australia's restraint level for 1969 is 225,000 tons compared with 215,600 tons in 1968. In that year supplying countries had voluntarily restrained shipments during the last quarter of the year to prevent the imposition of quotas.

Cattle slaughtered

CATTLE (INCLUDING CALVES) SLAUGHTERED
STATES AND TERRITORIES, 1936-37 TO 1967-68
('000)

Period	*Slaughterings passed for human consumption*									*Total slaughterings including boiled down*
	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*	
Average for three years ended—										
1938–39	1,169	881	1,178	163	131	49	5	3	3,579	3,628
1948–49	1,094	759	1,119	168	146	42	14	4	3,346	3,378
1958–59	1,745	1,313	1,689	274	216	116	24	11	5,388	5,463
Year—										
1963–64	1,930	1,760	1,857	279	373	176	50	12	6,437	6,484
1964–65	2,157	1,879	1,960	275	327	174	59	13	6,844	6,902
1965–66	1,780	1,829	1,888	277	315	154	69	11	6,323	6,371
1966–67	1,455	1,706	1,677	265	301	170	67	10	5,650	5,701
1967–68	1,447	1,713	1,664	245	333	172	74	10	5,656	5,732

Production of beef and veal

PRODUCTION OF BEEF AND VEAL (CARCASS WEIGHT)
STATES AND TERRITORIES, 1936-37 TO 1967-68
(Tons)

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Average for three years ended—									
1938–39 . .	181,057	122,758	199,340	26,074	27,743	10,222	1,336	560	569,089
1948–49 . .	160,702	106,219	206,403	27,043	29,521	8,687	3,024	763	542,361
1958–59 . .	247,508	176,161	304,984	41,166	41,058	19,454	5,130	2,013	837,475
Year—									
1963–64 . .	286,417	227,877	327,481	39,759	66,025	25,909	9,872	2,158	985,498
1964–65 . .	303,419	246,129	326,128	37,268	56,983	26,270	11,699	2,179	1,010,075
1965–66 . .	244,527	238,904	313,747	36,513	58,089	23,011	14,798	1,795	931,384
1966–67 . .	209,403	224,983	295,810	38,754	54,811	24,695	14,572	1,711	864,739
1967–68 . .	220,879	223,307	310,478	33,074	59,249	25,084	15,879	1,692	889,642

Consumption of beef and veal

The highest post-war consumption of beef and veal (including canned beef and veal) was 132.7 lb per head in 1956–57. With the buoyant overseas market for beef and the high prices ruling in Australia during the following four years, consumption per head fell substantially, and in 1960–61 amounted to only 88.3 lb. In 1967–68 consumption per head was 93.9 lb, of which 89.8 lb was carcass meat and 4.1 lb was canned meat (in terms of carcass equivalent).

PRODUCTION AND DISPOSAL OF BEEF AND VEAL (CARCASS WEIGHT)
AUSTRALIA, 1936-37 TO 1967-68

Period	*Net change in stocks*	*Production*	*Exports (a)*	*For canning*	*Apparent consumption in Australia* — *Total*	*Apparent consumption in Australia* — *Per head per year*
	'000 tons	'000 tons	'000 tons	'000 tons	'000 tons	lb
Average for three years ended—						
1938–39 . .	n.a.	569	121	18	430	140.3
1948–49 . .	+ 2	542	102	67	373	109.1
1958–59 . .	+ 5	837	209	85	538	123.8
Year—						
1963–64 . .	+ 2	985	423	43	517	104.8
1964–65 . .	+ 6	1,010	457	48	499	99.2
1965–66 . .	. .	931	412	44	476	92.6
1966–67 . .	− 5	865	384	40	446	85.3
1967–68 . .	− 6	890	381	37	478	89.8

(*a*) Includes carcass equivalent of boneless beef exported and all fresh and frozen meat shipped as ships' stores.

Exports of beef and veal

While beef and veal were previously shipped largely in carcass form, there has been in recent years a substantial increase in the amount of boneless beef exported. From 1958–59 to 1966–67 the quantity of boneless beef shipped exceeded that exported in carcass form. The trade in boneless beef has been developed principally with the United States of America. Since 1958–59 the United States has surpassed the United Kingdom as the principal market for Australian beef exports, the United Kingdom now occupying second place. The total value of beef and veal shipped to these two countries during 1967–68 was $156,654,000 and $16,402,000 respectively.

PRODUCTION OF MEAT: AUSTRALIA

1921-22 TO 1967-68

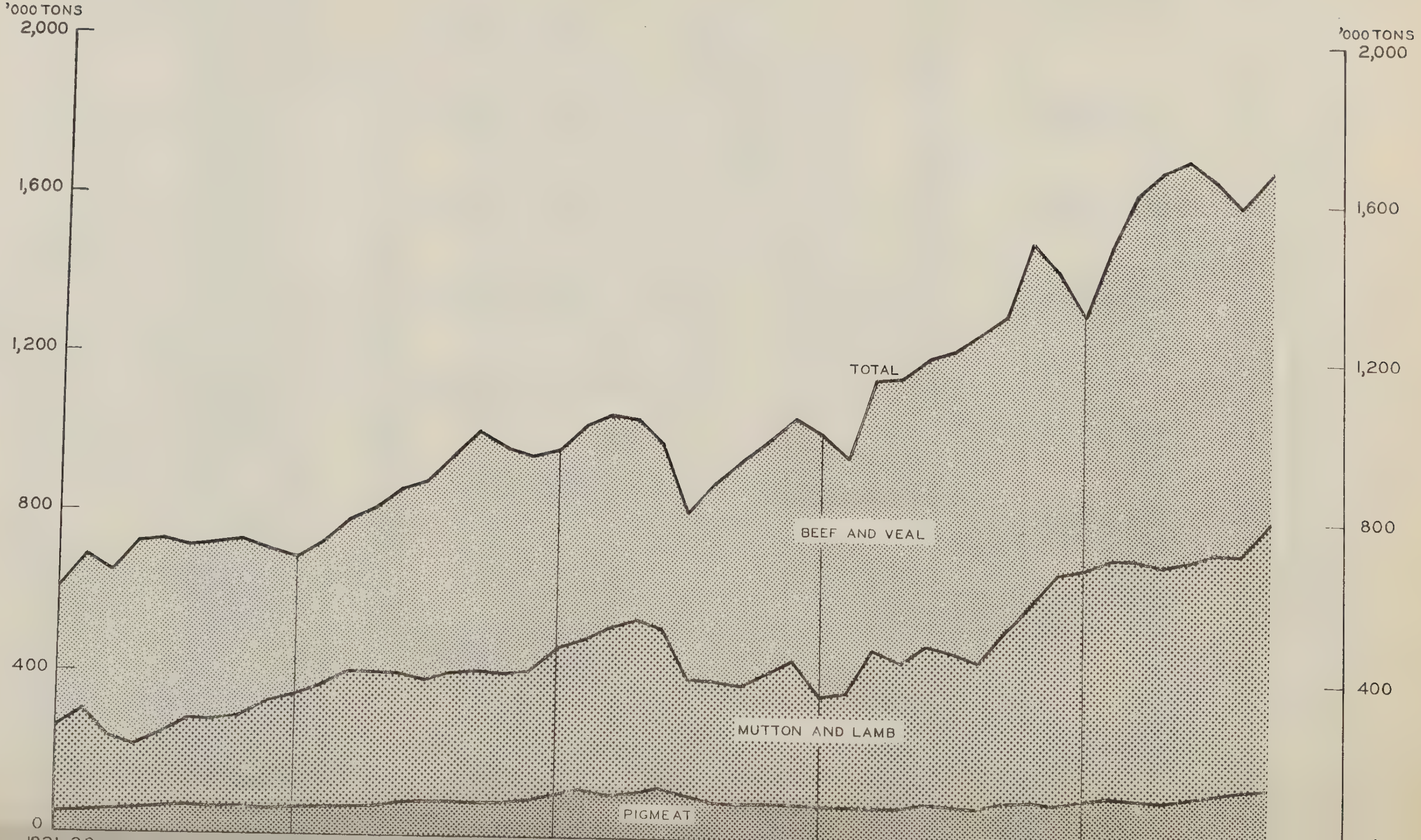


PLATE 44

EXPORTS OF FROZEN AND CHILLED BEEF AND VEAL(a): AUSTRALIA
1963-64 TO 1967-68

Year	*Exports of frozen and chilled beef*		*Exports of frozen veal*		*Exports of frozen and chilled beef and frozen veal*	
	Quantity	*Value*	*Quantity*	*Value*	*Quantity*	*Value*
	'000 lb	$'000 f.o.b.	'000 lb	$'000 f.o.b.	'000 lb	$'000 f.o.b.
1963–64	620,613	173,731	9,489	2,791	630,102	176,522
1964–65	679,989	192,404	27,919	7,958	707,908	200,363
1965–66	593,350	189,762	19,260	5,714	612,610	195,477
1966–67	562,330	192,321	15,889	5,922	578,219	198,243
1967–68	554,423	194,524	9,645	4,064	564,068	198,588

(a) Actual weight shipped, not carcass equivalent.

Sheep slaughtered

SHEEP (INCLUDING LAMBS) SLAUGHTERED: STATES AND TERRITORIES
1936-37 TO 1967-68
('000)

Period	*Slaughterings passed for human consumption*									*Total slaughterings including boiled down*
	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*	
Average for three years ended—										
1938–39 . .	6,520	7,891	1,088	1,762	1,216	364	..	25	18,866	18,925
1948–49 . .	6,367	6,413	1,066	1,863	1,458	396	3	47	17,613	17,650
1958–59 . .	7,857	9,058	1,429	2,917	2,059	775	3	71	24,169	24,278
Year—										
1963–64 . .	11,934	12,628	2,407	2,996	2,137	1,127	3	117	33,349	33,440
1964–65 . .	11,739	12,543	2,933	3,100	2,056	987	4	111	33,472	33,587
1965–66 . .	11,192	13,332	2,769	3,474	2,535	1,164	2	92	34,560	34,696
1966–67 . .	9,989	13,160	2,154	3,358	2,580	1,159	2	93	32,496	32,578
1967–68 . .	12,099	14,999	2,491	4,019	3,173	1,125	..	103	38,008	38,164

Production of mutton and lamb

PRODUCTION OF MUTTON AND LAMB (CARCASS WEIGHT)
STATES AND TERRITORIES, 1936-37 TO 1967-68
(Tons)

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Average for three years ended—									
1938–39 . .	103,884	136,927	20,121	30,574	20,928	6,129	2	413	318,978
1948–49 . .	109,084	111,677	18,587	34,772	23,846	7,214	64	839	306,083
1958–59 . .	135,256	164,580	25,845	50,415	35,373	14,077	77	1,240	426,863
Year—									
1963–64 . .	202,057	231,769	40,209	52,864	36,690	20,079	72	1,986	585,726
1964–65 . .	195,236	230,318	47,984	55,392	35,839	18,123	88	1,856	584,836
1965–66 . .	184,523	240,697	45,515	60,738	44,695	21,097	46	1,517	598,828
1966–67 . .	173.857	243,597	37,744	62,476	46,381	20,902	45	1,621	586,623
1967–68 . .	203,169	261,615	43,801	68,730	55,059	19,845	9	1,795	654,023

Consumption of mutton and lamb

In 1959–60 consumption of mutton and lamb, at 103 lb per head of population, showed a rise of approximately 16 lb per head over the previous year and exceeded that of beef and veal for the first time on record. Subsequently, it showed a continuous decline until 1965–66, when it fell to 82.8 lb per head. Since then this downward trend has been reversed and in 1967–68 consumption per head was 85.0 lb. Since 1962–63 consumption of mutton and lamb has been below that of beef and veal, the difference in 1967–68 being 4.9 lb per head.

PRODUCTION AND DISPOSAL OF MUTTON AND LAMB (CARCASS WEIGHT): AUSTRALIA, 1936-37 TO 1967-68

Period	*Net change in stocks* ('000 tons)	*Pro-duction* ('000 tons)	*Exports (a)* ('000 tons)	*For canning* ('000 tons)	*Apparent consumption in Australia*	
					Total ('000 tons)	*Per head per year* (lb)
			MUTTON			
Average for three years ended—						
1938–39 . .	n.a.	201	17	..	184	60.0
1948–49 . .	−1	177	15	8	154	45.1
1958–59 . .	..	268	27	19	222	51.0
Year—						
1963–64 . .	+2	361	112	9	238	48.1
1964–65 . .	+5	361	116	10	231	45.9
1965–66 . .	+4	390	141	9	236	46.0
1966–67 . .	−5	350	132	7	216	41.3
1967–68 . .	+3	412	180	8	222	41.7
			LAMB			
Average for three years ended—						
1938–39 . .	n.a.	118	72	..	46	15.0
1948–49 . .	−2	130	45	..	86	25.2
1958–59 . .	..	159	31	..	128	29.3
Year—						
1963–64 . .	..	225	21	..	205	41.5
1964–65 .	+1	224	26	..	197	39.2
1965–66 . .	+3	209	18	..	189	36.8
1966–67 . .	−3	237	18	..	222	42.5
1967–68 . .	..	242	11	..	230	43.2

(*a*) Includes carcass equivalent of boneless mutton exported.

Exports of frozen mutton and lamb

EXPORTS OF FROZEN MUTTON AND LAMB(*a*): AUSTRALIA, 1963-64 TO 1967-68

Year	*Exports of frozen mutton*		*Exports of frozen lamb*		*Exports of frozen mutton and lamb*	
	Quantity	*Value*	*Quantity*	*Value*	*Quantity*	*Value*
	'000 lb	$'000 f.o.b.	'000 lb	$'000 f.o.b.	'000 lb	$'000 f.o.b.
1963–64	149,918	24,752	41,606	7,718	191,524	32,470
1964–65	162,964	29,517	54,132	10,832	217,096	40,349
1965–66	176,424	37,242	35,574	8,176	211,998	45,417
1966–67	177,359	35,339	33,161	7,979	210,520	43,318
1967–68	232,317	44,141	20,336	5,546	252,653	49,687

(*a*) Actual weight shipped, not carcass equivalent.

In 1967–68 the principal buyers of Australian frozen mutton and lamb were Japan (92,126,000 lb, valued at $16,092,000); the United States of America (75,144,000 lb, valued at $16,303,000); Canada (37,113,000 lb, valued at $7,876,000); and the United Kingdom (22,343,000 lb, valued at $4,201,000).

Consumption of meat and meat products

The apparent consumption of meat (including cured and canned meat) and edible offal per head of population in Australia is shown in the table below for the years 1963–64 to 1967–68 in comparison with the averages for the three year periods ended 1938–39, 1948–49 and 1958–59.

MEAT (INCLUDING CURED AND CANNED) AND EDIBLE OFFAL AVAILABLE FOR CONSUMPTION: AUSTRALIA, 1936-37 TO 1967-68

(lb per head per year)

Period	*Beef and veal (a)*	*Mutton (a)*	*Lamb (a)*	*Pork (a)*	*Offal*	*Canned meat (b)*	*Bacon and ham (c)*	*Carcass equivalent of meat and meat products (d)*
Average for three years ended—								
1938–39 . .	140.3	60.0	15.0	8.5	8.4	2.1	10.2	250.9
1948–49 . .	109.1	45.1	25.2	7.1	8.9	2.6	11.7	215.7
1958–59 . .	123.8	51.0	29.3	10.1	11.4	4.1	7.1	242.4
Year—								
1963–64 . .	104.8	48.1	41.5	11.5	12.8	4.1	7.3	234.8
1964–65 . .	99.2	45.9	39.2	11.8	12.3	4.6	7.5	225.0
1965–66 . .	92.6	46.0	36.8	13.3	11.5	4.5	7.6	216.4
1966–67 . .	85.3	41.3	42.5	13.4	11.0	5.0	8.1	210.3
1967–68 . .	89.8	41.7	43.2	14.7	11.4	4.6	7.7	217.4

(*a*) Carcass weight. (*b*) Canned weight. (*c*) Cured carcass weight. (*d*) Includes offal.

Other pastoral products

Tallow

Details of tallow consumption are collected from the principal factories using tallow. Recorded usage of inedible tallow in factories classified to industry sub-classes industrial and heavy chemicals and acids, and soap and candles, for the five years 1963–64 to 1967–68 was as follows: 1963–64, 1,077,000 cwt; 1964–65, 1,157,000 cwt; 1965–66, 1,061,000 cwt; 1966–67, 1,007,000 cwt; 1967–68, 880,000 cwt. These figures are, however, deficient to the extent that no allowance has been made for small unrecorded amounts used in other types of establishments. Details of edible tallow consumed in factories are not available.

Particulars of exports of edible and inedible tallow of Australian origin are shown in the following table for the five years 1963–64 to 1967–68.

TALLOW: EXPORTS, AUSTRALIA, 1963-64 TO 1967-68

(cwt)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Edible . . .	135,425	96,611	51,869	244,582	88,465
Inedible . .	1,976,000	1,846,543	1,243,684	1,767,130	1,654,071
Total . .	**2,111,425**	**1,943,154**	**1,295,553**	**2,011,712**	**1,742,536**

Overseas trade in hides and skins

The value of cattle and horse hides, sheep and other skins, and skin pieces sent overseas during 1967–68 amounted to $63,731,000, compared with a total of $87,710,000 in 1966–67 and $88,501,000 in 1965–66.

Of the total exports of sheepskins with wool during 1967–68, amounting to 203,021,000 lb valued at $45,620,000, 126,353,000 lb valued at $25,487,000 (56 per cent of total value) were shipped to France, 45,161,000 lb valued at $13,364,000 (29 per cent) to Italy, and 9,270,000 lb valued at $1,741,000 (4 per cent) to the United Kingdom. In the previous year France received 57 per cent (by value) of all sheepskin with wool exported, Italy 27 per cent and the United Kingdom 4 per cent. The exports of sheepskins with wool during each of the years 1963–64 to 1967–68 were as follows.

EXPORTS OF SHEEPSKINS WITH WOOL: AUSTRALIA
1963–64 TO 1967–68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number	'000	27,913	27,248	28,952	27,578	29,757
Value	$'000	73,696	59,621	63,042	62,074	45,620

In 1967–68 a total of 1,233,000 sheepskins without wool were exported, valued at $497,000. Of these, sheepskins without wool to the value of $94,000 (19 per cent) were shipped to France, $87,000 (18 per cent) to Spain and $78,000 (16 per cent) to the United States of America.

The export trade in cattle hides and calfskins during 1967–68 was distributed among the main importing countries as follows: Japan $5,736,000; the Federal Republic of Germany, $2,015,000; and Italy $1,592,000. The total quantity exported was 111,290,000 lb, valued at $14,579,000.

The exports of furred skins in 1967–68 were valued at $1,845,000, of which kangaroo and wallaby skins constituted $1,180,000 and rabbit and hare skins $534,000. In 1966–67 they accounted for $1,426,000 and $666,000 respectively, out of a total of $2,335,000. The skins were shipped principally to the United States of America, the United Kingdom, the Federal Republic of Germany, and Italy; the values shipped to each in 1967–68 being: United States of America, $1,253,000; United Kingdom, $172,000; Federal Republic of Germany, $130,000; and Italy, $121,000.

The quantity of cattle hides, including calfskins, imported into Australia during the year 1967–68 amounted to 2,808,000 lb, valued at $447,000. The chief sources of supply were New Zealand and the United States of America.

OTHER RURAL INDUSTRIES: DAIRYING, POULTRY AND BEE-FARMING

The dairying industry

The introduction of cattle into Australia and the early history of the dairying industry are treated in some detail in earlier issues of the Year Book. Australian dairy cattle have shown steady improvement in quality, as demonstrated by yield, over the years. This is attributable to improved breeding, associated with herd recording, and better feeding, resulting from the use of improved pastures. Better farming methods, arising from the development of modern farm machinery and the application of the results of research, have also played a part in the increased yields.

The Australian dairying industry is conducted under conditions ranging from tropical to temperate and Mediterranean type climates, and nowhere is it necessary to house cattle in the winter months. Most Australian dairy cattle are fed only on pasture and pasture products, and this accounts for average yields being somewhat lower than in those countries where stock are fed heavily on concentrated feed. In general, dairy farming is confined to the coastal and near coastal regions where rainfall and topography are favourable. These conditions are found in parts of the eastern, southern and southwestern coasts. Inland districts include the lower north-east of Victoria, the south-western slopes of New South Wales, the fertile Darling Downs in Queensland, and the irrigated districts of the Riverina in New South Wales and northern Victoria.

The manufacturing and processing sections of the industry are highly organised and are well advanced technologically. Certain techniques and equipment developed in Australia are being adopted overseas. Dairy experts of the various State agricultural departments give instruction in approved methods of production, and inspect animals, buildings and marketable produce, with the result that a high standard of cleanliness and technology prevails in the industry.

Marketing of dairy products

The export trade is regulated by the terms of the Commonwealth *Customs Act* 1901–1967 and the Commonwealth *Commerce* (*Trade Descriptions*) *Act* 1905–1966 and regulations thereunder. This legislation requires that the true trade descriptions, etc. be marked on all produce intended for export, while official inspection ensures the maintenance of purity and quality. Upon request of the exporter the goods are given a certificate by the inspector.

Details of the *Dairy Produce Export Control Act* 1924–1966 and of the Australian Dairy Produce Board constituted under it were given in earlier issues of the Year Book (*see* No. 48, pages 999–1000). The administrative expenses of the Australian Dairy Produce Board and other sundry expenditure were met from the proceeds of a levy imposed by the *Dairy Produce Export Charges Act* 1964 (*see* Year Book No. 51, page 1070). In 1965 this Act, together with the *Dairy Produce Levy Act* 1958, was replaced by the *Butterfat Levy Act* 1965–1966 (*see* page 906).

Equalisation schemes

Reference is made to the butter and cheese equalisation schemes in Year Book No. 48, pages 998–9. Particulars of the returns realised on local and overseas sales and of the average equalisation rate for the years ended June 1964 to 1969 are given on page 913 of this issue. Details are also given on page 912 of the wholesale prices of butter and cheese for home consumption as determined by the Commonwealth Dairy Produce Equalisation Committee Ltd.

An equalisation scheme for casein similar to that for butter and cheese has been operated since 1952 by the Commonwealth Dairy Produce Equalisation Committee Ltd. Average realisations per cwt under the scheme were $16.101 in 1963–64, $17.381 in 1964–65, $24.918 in 1965–66, $23.556 in 1966–67, and $23.093 in 1967–68. The interim equalisation value for 1968–69 was initially fixed at $15.00 per cwt but was subsequently raised to $17.00.

Commonwealth subsidies and stabilisation plans

Butter and cheese. Under the provisions of the various Dairy Industry Assistance Acts, the first of which was passed in 1942, the Commonwealth Government has provided subsidies on milk supplied for the manufacture of butter and cheese. Subsidies were paid on a seasonal basis prior to 1 April 1946, but from that date have been on a flat rate basis. Subsidies are distributed by the Commonwealth Dairy Produce Equalisation Committee Ltd, through factories, to milk producers by payments on butter and cheese manufactured. Details of the three five-year stabilisation plans which operated up to 30 June 1962 will be found in Year Book No. 49, page 1084. Information regarding the plan which operated during the five years ended 30 June 1967 appears in Year Book No. 52, page 961.

A new five-year stabilisation plan came into operation on 1 July 1967. All the features of the previous plan have been retained. The fixed bounty of $27,000,000 payable in each year of the plan on butter, cheese and butterfat products containing 40 per cent or more butterfat is continued.

The underwriting of final minimum equalised returns on butter and cheese, each year, is also continued. Returns to producers which were underwritten at 33c per lb on commercial butter each year since the inception of the underwriting arrangement in 1958 were raised to 34c per lb for the 1967–68 season and maintained at that level for 1968–69.

Amounts realised on exports of butter and cheese were, in 1948–49 and 1949–50, in excess of the f.o.b. equivalent of the then guaranteed return and were credited to the Dairying Industry Stabilisation Fund, which was established in July 1948 for the purpose of stabilising returns from exports. During 1951–52 the Stabilisation Fund met the deficiency in respect of all exports which did not earn sufficient to meet the basic return to the factory. From 1 July 1952 to 30 June 1957 it was available to the industry to be used, in whatever manner it considered desirable, to make good any deficiency in respect of all exports other than the 20 per cent provided for under the Commonwealth Government's Five-year Stabilisation Plan. The Act was amended in 1957 to enable the Board to use the fund for such other purposes as are approved by the Minister for Primary Industry, and this amendment was later extended by the *Dairying Industry Act* 1962 to the present time. The amount standing to the credit of the Dairying Industry Stabilisation Fund at 30 June 1968 totalled approximately $4,750,000. The major portion of the fund represents capital and other investments in milk recombining plants now established or under construction by the Board in Bangkok, Djakarta and Manila. A new factory is to be established in Cambodia.

Processed milk products. Subsidy on milk supplied for the manufacture of processed milk products was also payable from 1942 until 30 June 1948, and again from 1 July 1949 to 30 June 1952. The Commonwealth Government provided, under the *Processed Milk Products Bounty Act* 1962, for the payment of a maximum amount of $700,000 as a bounty on exports of processed milk products in 1962–63. The bounty is to continue under present legislation until 30 June 1972, the maximum amounts made available being $1,000,000 for 1963–64 and $800,000 for each subsequent year.

Whole milk. In addition to the subsidies referred to above, the Commonwealth Government subsidised the production of whole milk consumed directly from 1943–44 to 1948–49. Details of the amounts distributed during each year will be found in Year Book No. 38, page 1031.

Extension, research and promotion of the dairying industry

Dairy Industry Extension Grant. An annual grant of $500,000, to be expended by State Governments for the purpose of promoting improved farming practices in the dairying industry, was first made by the Commonwealth Government for the five years from 1 July 1948. The grant was renewed at the same level until 30 June 1963 when it was increased to $700,000 per annum. On 1 July 1966 the Dairy Industry Extension Grant was incorporated in the Commonwealth Extension Services Grant, and assistance to the State agricultural departments for extension services to the dairying industry will be maintained from funds from this source until 1970–71 at least.

Dairy industry research and sales promotion. At the request of the Australian Dairy Industry Council, legislation was enacted in 1958 to provide for a sales promotion campaign for butter and cheese in Australia and also for research into industry problems. The legislation provided for a statutory levy on the manufacture of butter and cheese (the Dairy Produce Levy) which was initially set at rates of 0.104c per lb for butter and 0.052c per lb for cheese, the proceeds being divided equally between research and sales promotion. The rates of levy operative from November 1959 were 0.156c per lb for butter and 0.078c per lb for cheese, of which two-thirds was allocated to sales promotion and one-third to research.

In August 1964 the legislation was amended to include butter powder, at the same rates as for butter, and butteroil and ghee at 0.065c per lb for research and 0.130c per lb for sales promotion. In 1965 the Dairy Produce Levy Act was repealed and replaced by the *Butterfat Levy Act* 1965–1966 which provides for the amalgamation of the three levies into one levy on butterfat used in the manufacture of butter, cheese and related products. The maximum rate of levy in the Act is 60 cents per cwt of butterfat, and the prescribed rate operative from 1 July 1967 is 53 cents per cwt (22 cents for promotion, 21 cents for administration and overseas market development, and 10 cents for research).

The Commonwealth Government agreed to contribute one half of the costs incurred on approved projects included in the programme of research, with a maximum contribution of $1 for $1 against funds raised by way of levy and allocated to research. The sales promotion programme is financed solely by the levy. The following table lists the amounts of levies collected for research and sales promotion during the five years 1963–64 to 1967–68.

BUTTERFAT LEVY: AMOUNTS COLLECTED FOR RESEARCH AND SALES PROMOTION, 1963-64 TO 1967-68

($)

	1963–64(a)	*1964–65(a)*	*1965–66*	*1966–67*	*1967–68*
Research(*b*) . . .	264,200	262,800	310,200	406,100	363,700
Sales promotion . .	528,400	543,000	823,600	891,400	804,300
Total collected(*b*)	**792,600**	**805,800**	**1,133,800**	**1,297,500**	**1,168,000**

(*a*) Collected under Dairy Produce Levy Act. (*b*) Excludes amounts contributed by the Commonwealth Government.

The scheme is administered by the Australian Dairy Produce Board, which, in respect of research, is advised by a statutory committee, the Dairy Produce Research Committee.

Cattle for milk production

DAIRY BREED BULLS, AND COWS AND HEIFERS USED OR INTENDED FOR PRODUCTION OF MILK OR CREAM, 31 MARCH 1964 TO 1968

		Cows and heifers used or intended for production of milk or cream for sale			
			Heifers		
31 March—	*Bulls dairy breed(a)*	*Cows (in milk and dry)*	*One year and over(b)*	*Under one year*	*House Cows and heifers(c)*
1968—					
New South Wales	16,963	644,887	153,515	134,399	86,471
Victoria	38,714	1,200,140	337,887	345,316	26,340
Queensland	13,712	556,179	127,754	99,187	34,743
South Australia	5,476	138,871	42,366	35,524	6,877
Western Australia	3,087	99,547	49,624	29,536	8,903
Tasmania	3,508	152,179	43,321	44,802	5,529
Northern Territory	23	368	45	45	120
Australian Capital Territory	29	1,479	75	229	401
Australia	**81,512**	**2,793,650**	**754,587**	**689,038**	**169,384**
1967	87,235	2,880,681	795,771	671,957	179,675
1966	90,009	2,908,372	822,887	681,033	185,589
1965	95,012	3,011,832	843,212	690,267	202,138
1964	99,270	3,078,075	821,286	717,895	218,098

(*a*) Used or intended for service; excludes bull calves (under 1 year). (*b*) Springing (within 3 months of calving) and other. (*c*) Kept primarily for rural holdings' own milk supply.

For particulars relating to dairy cattle numbers up to 1963 *see* page 1078 of Year Book No. 50.

A map showing the distribution of dairy cattle in Australia at 31 March 1963 appears facing page 1082 of Year Book No. 50.

Milking machines

MILKING MACHINES ON RURAL HOLDINGS: NUMBER OF UNITS(*a*) STATES AND TERRITORIES, 1964 TO 1968

31 March—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1964	42,970	98,321	45,072	19,057	10,157	13,382	n.a.	83	(*b*)229,042
1965	42,209	101,994	44,074	19,135	10,055	13,806	23	93	231,389
1966	41,796	105,003	42,199	18,833	9,780	15,894	26	94	233,625
1967	41,433	108,664	40,878	18,143	9,664	16,414	35	94	235,325
1968	40,862	109,137	38,208	18,399	9,317	16,968	40	91	233,022

(*a*) The number of units indicates the number of cows that can be milked simultaneously, i.e. the cow capacity of installed milking machines. (*b*) Excludes Northern Territory.

Production of milk

The quantity of milk produced by a dairy cow can be as high as 1,000 gallons a year, and varies greatly with breed, locality and season. For all dairy cows and for all seasons for Australia prior to 1916 production averaged considerably less than 300 gallons per annum. Largely owing to an improvement in the quality of the cattle and the increased application of scientific methods the 300 gallon average has been exceeded in each year since 1924. In the last five years an average of 488 gallons per cow per annum has been obtained. In 1967–68 the average yield was 497 gallons. The annual average yields per cow shown in the following table are obtained by dividing the total production of whole milk for the year ended June by the mean of the number of cows in milk and dry and house cows at 31 March of that year and of the preceding year. They are, in effect, based on the approximate number of cows which were in milk during any part of the year. The average shown is, therefore, less than that for cows which were yielding during the greater part of the year, but it may be accepted as sufficiently reliable to show the general trend.

AVERAGE MILK PRODUCTION PER COW: STATES AND TERRITORIES
1936–37 TO 1967–68
(Gallons)

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Average for three years ended—									
1938–39	315	439	298	442	353	349	n.a.	349	(*a*)354
1948–49	310	506	267	565	370	419		328	(*a*)371
1958–59	322	522	267	513	406	537		420	(*a*)393
Year—									
1963–64	368	587	307	587	448	577	230	557	456
1964–65	347	613	306	614	490	589	248	547	467
1965–66	378	616	316	602	508	578	234	524	483
1966–67	423	647	366	624	480	591	268	548	521
1967–68	416	596	354	590	502	581	232	465	497

(*a*) Incomplete: excludes Northern Territory.

In the following table particulars of the production of whole milk in the various States and Territories are shown for the years 1963–64 to 1967–68 compared with the averages for the three years ended 1938–39, 1948–49 and 1958–59. In 1967–68, the production of whole milk in Australia reached a level of 1,497 million gallons, which was 7 per cent below the record of 1,605 million gallons attained in 1966–67. Victoria is the principal milk-producing State, and in 1967–68 the output from that State, 734 million gallons, represented 49 per cent of total production. Output from New South Wales in 1967–68 was 310 million gallons (21 per cent of the total) and that of Queensland 217 million gallons (15 per cent). Production in the remaining States and Territories accounted for 15 per cent.

TOTAL PRODUCTION OF WHOLE MILK: STATES AND TERRITORIES
1936–37 TO 1967–68
('000 gallons)

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Average for three years ended—									
1938–39	319,003	403,152	275,898	68,429	42,358	32,803	n.a.	363	*a*1,142,006
1948–49	280,460	445,517	252,469	92,587	49,004	32,638		573	*a*1,153,248
1958–59	307,514	578,529	240,446	84,185	54,218	65,032		929	*a*1,330,853
Year—									
1963–64	322,547	694,990	239,827	97,523	57,162	83,124	76	1,146	1,496,395
1964–65	291,931	745,896	230,289	102,330	61,883	87,343	98	1,094	1,520,864
1965–66	300,740	750,915	221,086	98,398	61,865	87,890	92	1,026	1,522,013
1966–67	322,995	796,673	238,134	98,727	55,611	91,418	97	1,070	1,604,725
1967–68	310,056	734,203	217,202	88,822	55,411	90,793	97	900	1,497,484

(*a*) Incomplete, excludes Northern Territory.

UTILISATION OF WHOLE MILK: STATES AND TERRITORIES, 1967–68
('000 gallons)

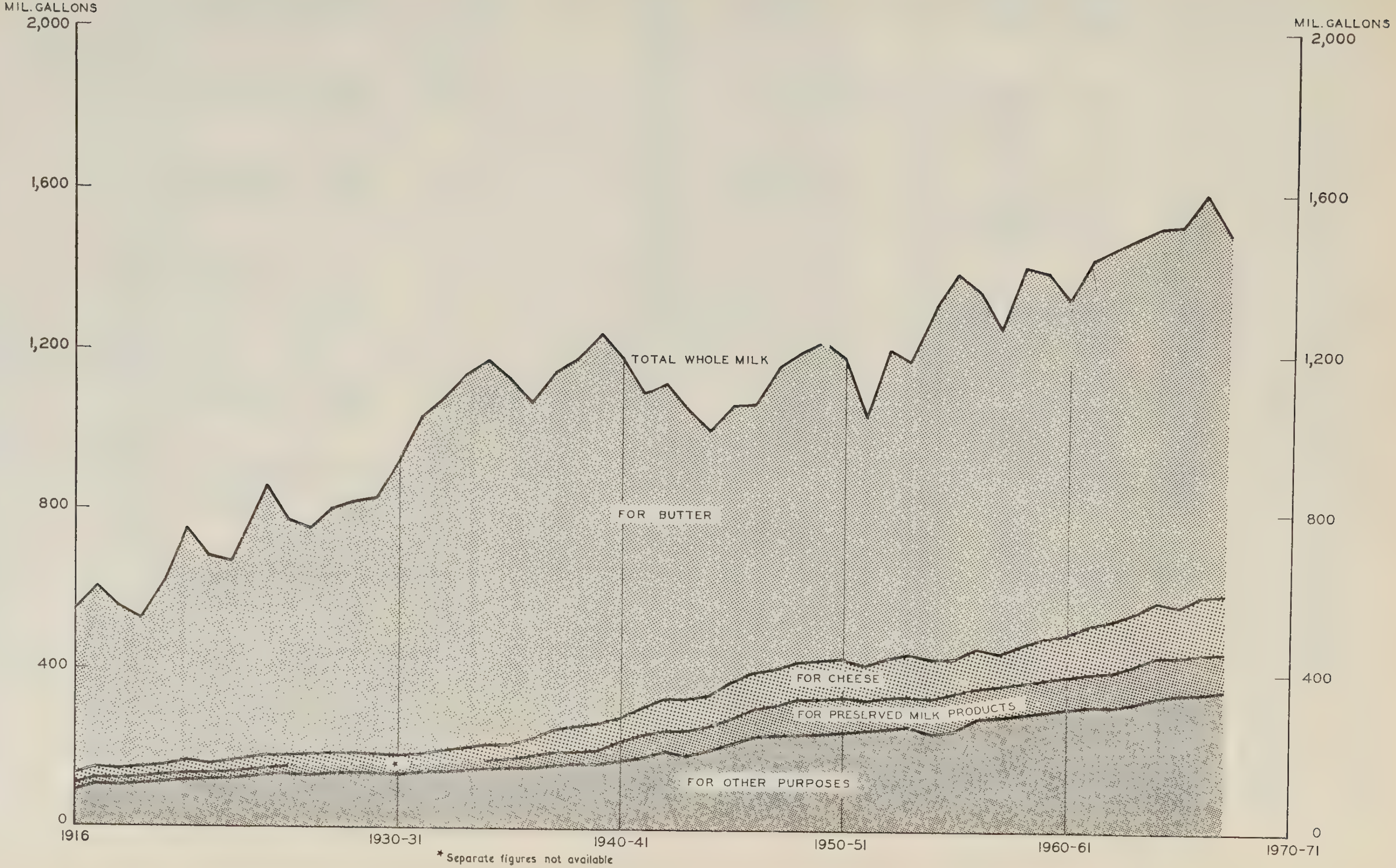
	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Milk used for—									
Butter	149,687	500,312	128,022	23,694	27,137	64,046	..	..	892,898
Cheese	10,466	69,450	21,908	32,948	4,264	10,408	..	..	149,444
Processed milk products	16,454	59,741	67,272	..	389	16,339	..	..	93,498
Other purposes	133,449	104,700		32,180	23,621		97	900	361,644
Total	**310,056**	**734,203**	**217,202**	**88,822**	**55,411**	**90,793**	**97**	**900**	**1,497,484**

In 1967–68, 59.6 per cent of the total milk supply was used for butter, 10.0 per cent for cheese, 6.2 per cent for processed milk products, and 24.2 per cent for other purposes.

MILK PRODUCTION AND UTILIZATION: AUSTRALIA

1916 TO 1967-68

PLATE 45



* Separate figures not available

PRODUCTION AND UTILISATION OF WHOLE MILK: AUSTRALIA
1936-37 TO 1967-68
('000 gallons)

Period	*Total production*	*Quantity used for—*			
		Factory butter(a)	*Factory cheese(a)*	*Processed milk products*	*Other purposes(b)*
Average for three years ended—					
1938–39	1,142,006	891,742	54,934	33,226	162,104
1948–49	1,153,248	738,377	91,642	78,739	244,490
1958–59	1,330,853	865,347	90,561	79,687	295,258
Year—					
1963–64	1,496,395	940,787	130,431	92,235	332,942
1964–65	1,520,864	938,796	135,733	96,973	349,362
1965–66	1,522,013	949,270	126,575	93,189	352,979
1966–67	1,604,725	1,011,000	146,547	94,046	353,132
1967–68	1,497,484	892,898	149,444	93,498	361,644

(*a*) Prior to 1964–65, includes milk equivalent of farm production. (*b*) Principally fluid milk for domestic purposes. Includes, from 1964–65, milk used for farm production of butter and cheese.

Production of butter, cheese and processed milk products

The establishment of large central butter factories, either on a co-operative or independent basis, has resulted in a considerable reduction in the cost of manufacture. The product is also of a more uniform quality, and whereas formerly the average quantity of milk used per pound of hand-made butter was about three gallons, factory butter requires only about two gallons. In addition, subsidy payments by the Commonwealth Government are made only on factory-produced butter. As a result the production of farm-made butter has declined to negligible proportions. A similar position exists in the cheese-making industry.

In 1967–68 factories classified to industry sub-classes Butter factories, Cheese factories, and Condensed and processed milk factories numbered 315 and were distributed among the States as follows: New South Wales, 69; Victoria, 109; Queensland, 60; South Australia, 38; Western Australia, 16; and Tasmania, 23. More details regarding numbers of factories, output, etc., are given in the chapter Manufacturing Industry.

Factory production of butter in 1967–68 was 432,313,000 lb. This was 56,904,000 lb (11.6 per cent) below the record of 489,217,000 lb attained in 1966–67.

BUTTER PRODUCTION IN FACTORIES: STATES, 1936-37 TO 1967-68
('000 lb)

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
Average for three years ended—							
1938–39 . .	111,250	137,908	117,907	17,868	12,999	8,812	406,744
1948–49 . .	70,323	131,522	94,624	20,223	14,856	10,044	341,591
1958–59 . .	75,784	196,356	85,413	16,820	15,259	23,784	413,417
Year—							
1963–64 . .	80,880	231,499	79,220	16,587	15,491	30,616	454,292
1964–65 . .	67,081	248,506	73,546	17,215	17,387	31,143	454,878
1965–66 . .	73,901	250,680	70,189	16,160	18,133	31,370	460,433
1966–67 . .	86,392	266,907	74,375	15,092	14,394	32,056	489,217
1967–68 . .	71,281	241,240	63,546	12,133	13,248	30,865	432,313

Factory production of cheese in 1967–68 reached a record level of 155,385,000 lb, which was 1,551,000 lb (1.0 per cent) more than the previous record of 1966–67.

CHEESE PRODUCTION IN FACTORIES: STATES, 1936-37 TO 1967-68

('000 lb)

Period	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Aust.
Average for three years ended—							
1938–39 . . .	7,347	16,141	11,357	15,380	957	3,190	54,371
1948–49 . .	5,342	38,927	19,972	26,844	2,171	1,436	94,692
1958–59 . .	9,784	39,440	15,331	25,128	2,524	750	92,958
Year—							
1963–64 . .	12,142	56,397	21,263	34,236	3,373	2,994	130,405
1964–65 . .	9,785	60,975	19,095	38,836	4,051	5,265	138,008
1965–66 . .	9,786	58,158	17,773	36,281	2,712	6,590	131,300
1966–67 . .	12,023	67,907	23,071	38,598	3,807	8,427	153,834
1967–68 . .	12,074	73,570	22,181	32,773	4,372	10,413	155,385

FACTORY PRODUCTION OF CHEESE BY VARIETIES: AUSTRALIA 1963-64 TO 1967-68

('000 lb)

	1963–64	1964–65	1965–66	1966–67	1967–68
Fetta	907	870	969	1,042	1,124
Cheddar . . .	121,472	127,507	119,176	137,657	138,655
Cottage . . .	1,096	1,070	1,561	1,876	2,215
Edam	(a)	417	436	531	691
Blue Vein . . .	(a)	115	106	187	102
Grating . . .	(a)	4,599	6,148	8,975	9,790
Soft	458	693			
Other	2,386	2,737	2,904	3,566	2,808
Total cheese .	**130,405**	**138,008**	**131,300**	**153,834**	**155,385**

(a) Not available for publication.

Processed milk products are manufactured mainly in Victoria, which produced 64 per cent of the total (in terms of whole milk equivalent) in 1967–68. New South Wales accounted for 18 per cent and the remaining States for 18 per cent.

PRODUCTION OF PROCESSED MILK PRODUCTS: AUSTRALIA 1963-64 TO 1967-68

('000 lb)

	1963–64	1964–65	1965–66	1966–67	1967–68
Condensed, concentrated and evaporated milk—					
Full cream—					
Sweetened(a)	95,744	102,479	73,985	61,510	47,316
Unsweetened	71,964	89,390	88,482	91,700	87,946
Skim	25,712	21,936	21,196	24,974	18,932
Ice cream mixes (liquid) . . .	11,896	10,810	15,198	15,422	9,065
Infants', invalid and health beverages—					
Infants' milk powder . . .	13,368	12,629	13,723	14,535	16,233
Other(b)	30,737	32,550	31,557	34,813	32,001
Casein	37,360	39,768	50,712	45,812	44,815
Powdered milk—					
Full cream—					
Spray	40,069	41,561	42,888	46,276	46,125
Roller	2,109	2,108	2,172	1,742	1,147
Skim—					
Without added ingredients—					
Spray	70,189	82,624	84,018	162,351	161,071
Roller	12,783	14,704	14,466	13,153	18,606
With added ingredients—					
Baker's powder . . .	4,854	5,264	5,577	5,401	5,937
Other	4,303	5,231	8,281	7,679	10,415
Buttermilk or mixed skim and buttermilk—					
Spray	4,650	4,702	8,345	12,829	15,836
Roller	17,060	16,183	17,555	19,689	17,756
Total powdered milk . .	*156,019*	*172,378*	*183,301*	*269,120*	*276,893*

(a) Includes 'coffee and milk'. (b) Includes malted milk and milk sugar (lactose).

Wholesale prices of butter and cheddar cheese in Australia

Details of prices operating in each of the States since 1 July 1956 are shown in the following table. The prices included are those determined by the Commonwealth Dairy Produce Equalisation Committee Ltd for choicest grade bulk butter and cheddar cheese.

WHOLESALE PRICES OF BUTTER AND CHEDDAR CHEESE: AUSTRALIA
($ per cwt)

Date from which prices became effective	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*
Butter—						
1 July 1956	46.67	46.67	46.55	46.43	46.67	46.67
1 July 1958	48.53	48.53	48.42	48.42	48.53	48.53
1 July 1960	50.17	50.17	50.05	50.17	50.17	50.17
19 June 1964	51.80	51.80	51.80	51.80	51.80	51.80
14 February 1966	52.08	52.08	52.08	52.08	52.08	52.08
Cheddar cheese—						
1 July 1956	28.23	28.23	28.23	28.12	28.23	28.23
1 July 1958	29.17	29.17	29.17	29.17	29.17	29.17
1 July 1960	29.63	29.63	29.63	29.63	29.63	29.63
19 June 1964	30.57	30.57	30.57	30.57	30.57	30.57
14 February 1966	30.80	30.80	30.80	30.80	30.80	30.80
7 November 1966	33.04	33.04	33.04	33.04	33.04	33.04

Local consumption of butter and cheese

Following the cessation of butter rationing after the 1939–45 War, consumption per head rose to 31.2 lb in 1951–52. However, in later years it gradually declined, and in 1967–68, at 21.6 lb per head, it reached its lowest level since the war. Consumption of cheese per head rose steadily in recent years and in 1965–66 reached a record level of 7.9 lb. This figure has since shown a downward trend. It was 7.5 lb in 1967–68.

PRODUCTION AND DISPOSAL OF BUTTER AND CHEESE
AUSTRALIA, 1936–37 TO 1967–68

				Apparent consumption in Australia	
Period	*Change in stocks(a)* ('000 lb)	*Production(b)* ('000 lb)	*Exports(c)* ('000 lb)	*Total* ('000 lb)	*Per head per year* (lb)
		BUTTER			
Average for three years ended—					
1938–39	n.a.	427,452	200,399	227,053	32.9
1948–49	−7,954	351,922	170,121	189,755	24.8
1958–59	−1,443	419,760	155,987	265,216	27.2
Year—					
1963–64	−5,192	456,620	203,909	257,902	23.3
1964–65	−16,265	454,878	216,875	254,268	22.5
1965–66	+19,398	460,433	190,607	250,428	21.8
1966–67	−872	489,217	234,611	255,478	21.8
1967–68	−3,068	432,313	177,331	258,050	21.6
		CHEESE			
Average for three years ended—					
1938–39	n.a.	55,659	25,692	29,967	4.4
1948–49	−1,839	94,848	54,562	42,125	5.5
1958–59	+6,301	93,110	30,820	55,989	5.7
Year—					
1963–64	−11,820	130,460	62,451	79,829	7.2
1964–65	−7,777	138,008	61,087	84,699	7.5
1965–66	−16,916	131,300	56,964	91,251	7.9
1966–67	+5,248	153,834	57,423	91,162	7.8
1967–68	−10,527	155,385	76,249	89,663	7.5

(a) Balance figure for 1946–47 and subsequent years; includes allowance for imports. (b) Factory production only from 1964–65. (c) Includes ships' stores; figures for butter include ghee and butter concentrate expressed as butter.

Average returns from butter and cheddar cheese sold

The table below shows rates realised on local, interstate and overseas sales and the average equalisation and subsidy rates in operation for the years ended June 1964 to 1969.

BUTTER AND CHEDDAR CHEESE: RATES REALISED ON SALES, AVERAGE EQUALISATION RATES AND RATES OF COMMONWEALTH SUBSIDY UNDER DAIRYING INDUSTRY ACTS, 1963-64 TO 1968-69

(*Source:* Commonwealth Dairy Produce Equalisation Committee Ltd)

($ per cwt)

Year	*Rates realised on sales*				*Average equalisation rate*	*Rate of subsidy*	*Rate of overall return to manufacturer*
	Intrastate	*Interstate*	*Manufacturing*	*Overseas*			
Butter—							
1963–64	48.65	47.03	31.40	33.82	41.73	6.10	47.83
1964–65	50.08	48.18	31.63	34.08	42.25	6.09	48.33
1965–66	50.06	47.47	32.26	30.63	40.27	6.01	46.28
1966–67	49.88	47.46	31.97	29.87	39.38	5.66	45.04
1967–68	(*a*)	(*a*)	(*a*)	(*a*)	(*b*)39.35	6.31	(*b*)45.66
1968–69	(*a*)	(*a*)	(*a*)	(*a*)	(*b*)38.35	(*b*)5.55	(*b*)43.90
Cheddar cheese—							
1963–64		28.54		21.13	25.51	2.36	27.87
1964–65		29.32		22.11	26.00	2.23	28.23
1965–66		29.43		23.18	25.98	2.36	28.34
1966–67		(*a*)		(*a*)	27.01	2.04	29.05
1967–68		(*a*)		(*a*)	(*b*)25.00	2.38	(*b*)27.38
1968–69		(*a*)		(*a*)	(*b*)23.94	(*b*)2.65	(*b*)26.59

(*a*) Not yet available. (*b*) Interim rates.

The distribution between factory and farm of the overall return to manufacturers for butter is shown in the following table.

COMMERCIAL BUTTER: AVERAGE OVERALL RETURNS AUSTRALIA, 1963-64 TO 1968-69

(*Source:* Commonwealth Dairy Produce Equalisation Committee Ltd)

(Cents per lb)

Year	*Average overall returns on commercial butter*		
	Rate of overall return to manufacturer	*Estimated manufacturing cost*	*Return to dairy farmer*
1963–64	42.705	4.449	38.256
1964–65	43.154	4.449	38.705
1965–66	41.324	4.449	36.875
1966–67	40.214	4.583	35.631
1967–68	(*a*)40.768	4.583	36.185
1968–69	(*a*)39.196	4.750	34.446

(*a*) Interim rates.

Overseas trade in dairy products

The production of butter and cheese in Australia is considerably in excess of local requirements, and consequently a substantial surplus is available for export overseas. In normal circumstances the extent of this surplus is chiefly dependent upon seasonal conditions.

Exports of butter in 1967–68 amounted to 148.6 million lb, compared with 205.6 million lb in 1966–67. Exports of cheese in these years were 76.0 million lb and 57.2 million lb respectively. The principal importing country for Australian butter and cheese in 1967–68 was the United Kingdom, accounting for 84.2 per cent and 53.7 per cent of total exports of butter and cheese respectively. In 1966–67 Japan had replaced the United Kingdom as the principal importing country of Australian cheese but in 1967–68 accounted for only 19.5 per cent of cheese exports.

All butter and cheese exported comes under the provisions of the Exports (Dairy Produce) Regulations and is subject to supervision, inspection and examination by officers appointed for that purpose. These commodities are graded according to quality, which has been fixed by regulation as follows: flavour and aroma, 50 points; texture, 30 points; and condition, 20 points. Butter and cheese graded at 93 to 100 points is of choicest quality; at 90 to 92 points, first quality; at 86 to 89 points, second quality; and at 80 to 85 points, pastry or cooking quality or, in the case of cheese, third quality.

In the following table particulars are given of the relative proportions of butter and cheese graded for export according to quality. Further details, which include actual quantities by States, will be found in *Rural Industries*, 1966–67, Bulletin No. 5.

BULK BUTTER AND CHEESE GRADED FOR EXPORT: AUSTRALIA, 1965-66 TO 1967-68

Grade	*Quantity ('000 lb)*			*Percent*		
	1965–66	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
			BUTTER(*a*)			
Choicest quality	148,642	164,364	136,312	73.7	77.3	80.2
First quality	41,768	37,126	25,581	20.7	17.5	15.1
Second and pastry quality(*b*)	11,409	11,111	8,021	5.7	5.2	4.7
Total	**201,819**	**212,601**	**169,914**	**100.0**	**100.0**	**100.0**
			CHEESE			
Bulk cheddar—						
Choicest quality	2,773	10,500	19,967	5.2	16.7	26.2
First quality	34,872	34,886	40,214	65.8	55.5	52.7
Second quality(*b*)	2,554	1,295	1,972	4.8	2.1	2.6
Other cheese	12,825	16,194	14,154	24.2	25.8	18.5
Total	**53,024**	**62,875**	**76,307**	**100.0**	**100.0**	**100.0**

(*a*) Includes unsalted. (*b*) Includes rejected.

Exports of butter, cheese and other milk products of Australian origin are shown in the following table.

EXPORTS OF DAIRY PRODUCTS: AUSTRALIA, 1965-66 TO 1967-68

	Quantity ('000 lb)			*Value ($'000 f.o.b.)*		
	1965–66	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
Butter(*a*)	167,625	205,550	148,634	49,989	55,094	39,114
Cheese(*b*)—						
Processed(*c*)	12,430	12,633	11,049	4,294	4,995	4,352
Other—						
Cheddar and epicure cheddar	32,141	30,893	55,479	6,490	6,707	11,085
Parmesan (incl. parmigiano and reggiono)	6	62	129	2	30	43
Other	11,201	13,606	9,379	2,684	3,529	2,453
Total cheese	*55,777*	*57,195*	*76,036*	*13,470*	*15,262*	*17,933*
Other milk products—						
Preserved, condensed, concentrated, etc.—						
Sweetened	44,661	35,781	13,228	5,650	4,601	1,741
Unsweetened	14,228	14,543	11,638	1,619	1,656	1,350
Infants' and invalids' food (essentially of milk)(*d*)	13,301	10,698	11,436	3,811	3,244	3,632
Casein	43,342	42,470	37,020	10,183	9,545	8,227
Dried or powdered—						
Full cream	20,181	28,282	24,865	5,161	7,515	6,958
Skim	42,018	118,279	87,025	5,333	15,095	9,493

(*a*) Excludes butter concentrate, ghee, and ships' stores. (*b*) Excludes ships' stores. (*c*) Includes pastes and spreads. (*d*) Includes malted milk.

Pigs

At 31 March 1968 the number of pigs in Australia reached a record level of 2,056,000 which represented an increase of 252,000 (14.0 per cent) on the previous record at 31 March 1967 (1,804,000).

PIGS: NUMBERS IN STATES AND TERRITORIES, 1937 TO 1968

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Average for three years ended—									
1939 . .	374,963	285,465	299,707	74,329	74,657	42,802	404	481	1,152,808
1949 . .	366,267	261,922	375,191	101,934	91,862	43,184	424	554	1,241,338
1959 . .	377,510	263,363	405,702	99,632	135,404	61,389	2,543	160	1,345,703
At 31 March—									
1964 . .	391,300	322,051	388,144	153,415	128,140	82,534	1,806	121	1,467,511
1965 . .	448,661	378,055	406,028	195,873	137,192	92,021	2,182	(*a*)	(*b*)1,660,012
1966 . .	479,768	383,509	417,235	223,586	144,022	96,156	2,275	(*a*)	(*b*)1,746,551
1967 . .	513,575	350,591	467,572	222,334	160,983	85,654	2,791	(*a*)	(*b*)1,803,500
1968 . .	645,196	376,990	520,141	242,319	182,507	86,517	1,999	(*a*)	(*b*)2,055,669

(*a*) Not available for publication. (*b*) Incomplete; excludes Australian Capital Territory.

A long-term comparison of pig numbers is given in the division Pastoral Production of this chapter (*see* page 879). A map showing the distribution of pigs in Australia at 31 March 1963 faces page 1083 of Year Book No. 50 and a graph showing the number of pigs in Australia from 1870 onwards appears on plate 42 of this Year Book (*see* page 880).

PIGS SLAUGHTERED: STATES AND TERRITORIES, 1936-37 TO 1967-68

('000)

	Slaughterings passed for human consumption									*Total slaughterings (including boiled down)*
Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*	
Average for three years ended—										
1938–39 . .	562	503	530	155	109	65	1		1,925	1,961
1948–49 . .	440	371	448	154	138	54	1		1,606	1,615
1958–59 . .	594	439	474	159	191	94	5		1,956	1,968
Year—										
1963–64 . .	636	531	606	214	185	124	2	7	2,305	2,313
1964–65 . .	674	599	623	241	182	135	3	5	2,461	2,468
1965–66 . .	774	703	640	298	195	146	2	9	2,769	2,777
1966–67 . .	849	698	666	316	214	149	2	9	2,903	2,912
1967–68 . .	908	700	735	310	242	143	3	9	3,049	3,058

Production of pigmeat, bacon and ham

PRODUCTION OF PIGMEAT (CARCASS WEIGHT): STATES AND TERRITORIES 1936-37 TO 1967-68

(Tons)

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Average for three years ended—									
1938–39 . .	25,558	24,569	23,522	7,538	4,322	2,893	5	43	(*a*)88,450
1948–49 . .	27,182	22,308	22,856	8,993	8,500	2,916	24	36	92,815
1958–59 . .	28,272	23,097	23,180	8,778	9,624	4,156	84	209	97,400
Year—									
1963–64 . .	28,717	25,306	29,919	11,163	9,852	5,927	73	326	111,283
1964–65 . .	31,509	28,048	31,259	12,656	9,861	6,585	90	218	120,226
1965–66 . .	35,343	33,195	31,394	15,223	10,444	7,023	93	428	133,143
1966–67 . .	38,283	33,094	33,255	15,947	11,584	7,164	87	386	139,800
1967–68 . .	41,129	33,204	36,739	15,787	13,159	6,890	93	385	147,386

(*a*) Excludes trimmings from baconer carcasses.

PRODUCTION OF BACON AND HAM (CURED CARCASS WEIGHT)(a): STATES 1936-37 TO 1967-68

(Tons)

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
Average for three years ended—							
1938–39	10,396	7,556	8,759	2,940	1,838	1,022	32,511
1948–49	14,436	10,787	9,846	4,580	4,209	1,196	45,054
1958–59	11,132	8,302	10,294	3,275	2,987	1,078	37,068
Year—							
1963–64	13,503	8,629	10,843	3,605	3,792	1,166	41,538
1964–65	13,923	9,366	11,086	3,822	3,998	1,171	43,366
1965–66	15,055	9,357	12,342	4,106	4,298	1,062	46,220
1966–67	15,366	9,995	14,670	4,403	4,624	1,242	50,300
1967–68	15,134	9,340	14,103	4,110	5,128	1,281	49,096

(a) Pressed and canned bacon and ham have been converted to cured carcass weight for periods subsequent to 1948–49.

Consumption of pigmeat, bacon and ham

The apparent consumption of pigmeat increased from 13.4 lb per head in 1966–67 to a record post-war figure of 14.7 lb in 1967–68.

PRODUCTION AND DISPOSAL OF PIGMEAT (CARCASS WEIGHT): AUSTRALIA 1936-37 TO 1967-68

Period	*Change in stocks(a)*	*Production*	*Exports*	*Curing and canning*	*Apparent consumption (as pork or smallgoods) in Australia*	
					Total	*Per head per year*
	'000 tons	'000 tons	'000 tons	'000 tons	'000 tons	lb
Average for three years ended—						
1938–39	n.a.	88.5	13.7	48.6	26.2	8.5
1948–49	−1.2	92.8	6.3	63.4	24.3	7.1
1958–59	. .	97.4	0.8	53.0	43.6	10.1
Year—						
1963–64	−3.4	111.3	0.2	57.5	57.0	11.5
1964–65	−0.2	120.2	0.4	60.7	59.3	11.8
1965–66	. .	133.1	0.5	64.3	68.4	13.3
1966–67	−1.1	139.8	0.9	69.8	70.2	13.4
1967–68	+0.9	147.4	0.6	67.8	78.2	14.7

(a) Includes allowance for imports.

PRODUCTION AND DISPOSAL OF BACON AND HAM (CURED CARCASS WEIGHT): AUSTRALIA, 1936-37 TO 1967-68

Period	*Change in stocks*	*Production*	*Exports*	*Canning*	*Apparent consumption in Australia*	
					Total	*Per head per year*
	'000 tons	'000 tons	'000 tons	'000 tons	'000 tons	lb
Average for three years ended—						
1938–39	n.a.	32.5	1.0	..	31.5	10.2
1948–49	..	45.1	3.1	2.1	39.9	11.7
1958–59	+0.1	37.1	0.5	6.0	30.5	7.1
Year—						
1963–64	..	41.5	0.1	5.5	36.0	7.3
1964–65	..	43.4	0.1	5.2	38.0	7.5
1965–66	+0.2	46.2	0.2	7.0	38.8	7.6
1966–67	−0.2	50.3	0.2	8.1	42.1	8.1
1967–68	+0.1	49.1	0.2	7.7	41.1	7.7

Exports of pigs and pig products

EXPORTS OF PIGS AND PIG PRODUCTS: AUSTRALIA, 1965-66 TO 1967-68

		Quantity			*Value ($'000 f.o.b.)*		
		1965–66	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
Bacon and ham (including canned)	'000 lb	487	564	574	334	406	448
Lard	'000 lb	157	98	72	27	16	14
Frozen pork	'000 lb	1,064	2,060	1,239	436	826	540
Pigs, live	number	n.a.	680	806	n.a.	47	47

The poultry industry

Originally the poultry industry was conducted in conjunction with other branches of rural activity, mainly dairying, but it is now a specialised and distinct industry. It is from this source that the bulk of the commercial production is obtained. Practically all farm households keep poultry for the purpose of supplying their own domestic requirements, and some supplies from this source are also marketed. In addition, some private homes in both rural and suburban areas keep small numbers of fowls in back-yard runs to help satisfy domestic needs. Because of the incompleteness of data available on poultry throughout Australia, details of poultry numbers are not published.

Stabilisation scheme for the egg industry

A Commonwealth industry stabilisation scheme for the egg industry has been in operation since 1 July 1965. The principal features of the scheme are embodied in three Commonwealth Acts—*Poultry Industry Levy Act* 1965–1966, *Poultry Industry Levy Collection Act* 1965–1966, and *Poultry Industry Assistance Act* 1965–1966.

The scheme provides for the imposition of a levy on hens over six months of age kept for commercial purposes. The money obtained from the levy is used to meet trading losses on surplus eggs. Previously, returns to producers were equalised by State Egg Boards, who imposed an equalisation deduction to cover deficits which resulted from sales to overseas markets.

In determining the rate of the hen levy, the Minister for Primary Industry is required to take into consideration any recommendations by the Council of Egg Marketing Authorities of Australia (which consists of all members of the State Egg Marketing Boards) and is precluded from prescribing a rate in excess of such recommendations. The initial rate of levy was set at about 2.71c per hen per fortnight (the equivalent of $0.70 per bird per year). This rate was increased to 2.80c on 23 February 1966. Following upon recommendations by the Council of Egg Marketing Authorities of Australia, the Minister for Primary Industry approved an increase in the levy to 3.50c per fortnight operative from 13 July 1966. As from 19 April 1967 the levy was increased to 5.00c per fortnight for the remainder of the financial year 1966–67. This had the effect of raising the total levy for the year to the maximum permitted under the legislation of $1.00 per hen per year. For 1967–68 and 1968–69 the maximum levy was again imposed, to be apportioned at 4.00c per hen per fortnight for 24 periods and 2.00c per hen per fortnight for the remaining 2 periods.

Exemptions from payment are granted on the first twenty hens in each flock and also on a substantial proportion of broiler breeder hens. The eggs produced by broiler breeder hens which are not used for hatching determine the proportion of those hens on which the levy becomes payable in accordance with a formula incorporated in the legislation.

By arrangement between the Commonwealth and State Governments, the State Egg Boards collect the levy due in each State from individual producers and remit the total amount to the Commonwealth (the Department of Primary Industry collects the levy in the Australian Capital Territory). The Commonwealth Government pays into the Poultry Industry Trust Fund amounts equal to the receipts obtained from the hen levy. These amounts totalled $10,949,000 in 1967–68 ($8,907,000 in 1966–67). Payments from the Fund are made to the State Governments for financial assistance to the poultry industry, and are authorised by the Minister for Primary Industry, after consideration has been given to the recommendations by the Council of Egg Marketing Authorities of Australia. Payments from the Trust Fund totalled $10,420,000 in 1967–68 ($9,057,000 in 1966–67).

Research

The *Poultry Industry Assistance Act* 1965–1966 permits expenditure from the Poultry Industry Trust Fund to be made for research. The Commonwealth Government has agreed to match expenditure from this Fund on a $1 for $1 basis with a limit to its contribution of $100,000. There is no restriction on the amount which may be expended from the Fund for research purposes.

Research projects are recommended by the Council of Egg Marketing Authorities of Australia for approval by the Minister for Primary Industry. Expenditure may be approved for scientific, technical or economic research, the publication of reports thereon, the training of persons for research, and the dissemination of information and advice on scientific, technical or economic matters.

Marketing of eggs

Details of the *Egg Export Control Act* 1947 were given in earlier issues of the Year Book (*see* No. 47, page 997).

Chicken hatchings and poultry slaughterings

Statistics shown in the following section have been compiled on a Commonwealth basis since 1965–66 from returns supplied by commercial chicken hatcheries (i.e. those making sales of day-old chicks) and by commercial poultry slaughtering establishments. Poultry farmers hatching chicks solely for replenishing their own flocks, and the many very small producers, including producers in the Australian Capital Territory and the Northern Territory, are excluded from the collection. However, the statistics represent a high level of coverage in respect of commercial hatcheries and slaughtering establishments.

Poultry slaughtered for human consumption

No allowance has been made in the following figures for interstate movement of dressed poultry or changes in stocks held, and figures therefore do not necessarily represent the level of consumption in the States concerned.

Statistics for poultry slaughtered in Queensland are based on numbers slaughtered as collected by the Queensland Department of Primary Industries.

NUMBERS OF POULTRY SLAUGHTERED FOR HUMAN CONSUMPTION 1965-66 TO 1967-68

('000)

	Chickens(a)	*Other fowls(b)*	*Ducks and drakes*	*Turkeys*
1967–68—				
New South Wales	36,556	2,464	335	483
Victoria	15,519	990	248	95
Queensland	12,190	1,154	78	31
South Australia	4,278	285	35	15
Western Australia	6,957	362	45	36
Tasmania	861	148	49	(*c*)
Australia	**76,361**	**5,403**	**790**	**660**
1966–67	67,085	4,760	775	694
1965–66	52,551	4,601	841	481

(*a*) Comprises broilers, fryers and roasters. (*b*) Comprises hens, roosters, etc. (*c*) Included with ducks and drakes.

DRESSED WEIGHT OF POULTRY SLAUGHTERED FOR HUMAN CONSUMPTION(*a*) 1965-66 TO 1967-68

('000 lb)

	Chickens(b)	*Other fowls(c)*	*Ducks and drakes*	*Turkeys*	*Total*
1967–68—					
New South Wales	96,035	9,015	1,259	4,658	110,967
Victoria	41,386	3,318	883	963	46,550
Queensland(*d*)	29,841	4,511	353	252	34,957
South Australia	10,962	964	138	155	12,219
Western Australia	16,862	1,338	225	335	18,759
Tasmania	2,264	525	241	(*e*)	3,030
Australia	**197,350**	**19,671**	**3,099**	**6,363**	**226,482**
1966–67	168,130	16,940	2,997	7,093	195,159
1965–66	127,551	15,910	3,419	5,122	152,002

(*a*) Dressed weight of all birds, including pieces and giblets, as reported in all States except Queensland. (*b*) Comprises dressed weight of broilers, fryers and roasters. (*c*) Comprises dressed weight of hens, roosters, etc. (*d*) Estimated. (*e*) Included with ducks and drakes.

Chicken hatchings in commercial hatcheries

Details contained in the following tables relate to all eggs set and to chicks hatched in commercial hatcheries whether for sale as day-old chicks or for replenishment of own flocks.

NUMBER OF EGGS SET(*a*) IN COMMERCIAL HATCHERIES: STATES, 1965-66 TO 1967-68

('000)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
			MEAT STRAINS				
1965–66	40,226	18,758	n.a.	5,089	(*b*)	953	(*c*)65,026
1966–67	50,141	19,626	n.a.	6,215	(*b*)	1,227	(*c*)77,209
1967–68	54,270	20,655	17,969	7,407	(*b*)	(*b*)	112,484
			EGG STRAINS				
1965–66	19,096	10,956	n.a.	4,464	3,362	1,067	(*c*)38,945
1966–67	19,847	12,206	n.a.	5,352	3,784	761	(*c*)41,950
1967–68	19,510	12,578	8,823	5,060	3,256	1,024	50,251

(*a*) Includes eggs which failed to hatch. (*b*) Not available for publication. (*c*) Incomplete; *see* individual States.

CHICKENS HATCHED(*a*) IN COMMERCIAL HATCHERIES: STATES, 1965-66 TO 1967-68

('000)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
INTENDED FOR CHICKEN MEAT—MEAT STRAINS (Unsexed)							
1965–66 . .	26,136	13,705	n.a.	3,501	(*b*)	582	(*c*)43,924
1966–67 . .	34,163	14,486	n.a.	4,383	(*b*)	833	(*c*)53,865
1967–68 . .	37,629	15,806	13,456	5,218	(*b*)	(*b*)	80,874
INTENDED FOR CHICKEN MEAT—EGG STRAINS (Crossbred and other cockerels)(*d*)							
1965–66 . .	3,109	2,135	n.a.	274	324	107	(*c*)5,949
1966–67 . .	1,743	1,509	n.a.	230	313	72	(*c*)3,867
1967–68 . .	1,545	1,567	759	134	105	43	4,153
INTENDED FOR EGG PRODUCTION—EGG STRAINS (Pullets)(*d*)							
1965–66 . .	5,934	3,710	n.a.	1,525	1,077	372	(*c*)12,618
1966–67 . .	6,293	4,114	n.a.	1,925	1,253	273	(*c*)13,858
1967–68 . .	6,093	4,251	2,862	1,904	1,143	371	16,624

(*a*) Excludes chicks destroyed. (*b*) Not available for publication. (*c*) Incomplete; *see* individual States. (*d*) Includes (for States other than Queensland) a proportion of unsexed egg strain chicks.

Recorded production of eggs and egg products

Available statistics of the production and disposal of eggs in Australia are restricted to those recorded by the Australian Egg Board and the Egg Marketing Board of New South Wales. Details of production as recorded by these authorities are shown in the following table.

SHELL EGGS: PRODUCTION(*a*) RECORDED BY EGG BOARDS STATES, 1963–64 TO 1967–68

('000 dozen)

State	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
New South Wales(*b*)	56,713	62,918	65,240	68,043	74,682
Victoria.	24,992	28,016	29,925	34,100	38,231
Queensland	12,459	14,182	17,062	20,474	21,393
South Australia	8,731	9,354	11,218	13,176	15,813
Western Australia	8,331	9,620	9,295	9,810	11,583
Tasmania	n.a.	n.a.	n.a.	n.a.	n.a.
Total(*c*)	**111,226**	**124,089**	**132,740**	**145,603**	**161,702**

(*a*) Receipts from consignors and sales by producer agents. (*b*) Includes Australian Capital Territory. (*c*) Excludes Tasmania.

Particulars of the production of whole egg pulp as recorded by the Egg Marketing Board for the State of New South Wales and by the Australian Egg Board for the other States are shown in the following table.

LIQUID WHOLE EGG PULP: PRODUCTION RECORDED BY EGG BOARDS STATES, 1963–64 TO 1967–68

('000 lb)

State	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
New South Wales	9,272	18,463	12,540	15,581	14,531
Victoria	3,216	5,456	3,286	5,825	8,731
Queensland	3,922	5,731	5,450	6,718	7,779
South Australia	3,001	2,639	4,148	4,953	7,024
Western Australia	835	1,450	977	1,143	1,802
Tasmania	n.a.	n.a.	n.a.	n.a.	n.a
Total(*a*)	**20,246**	**33,739**	**26,401**	**34,220**	**39,867**

(*a*) Excludes Tasmania.

In addition to liquid whole egg, production was also recorded of liquid egg whites and liquid egg yolks. Output in 1967–68 amounted to 5,943,000 lb and 4,566,000 lb respectively, compared with 2,101,000 lb and 1,526,000 lb respectively in the previous year. These figures exclude small quantities produced in Tasmania for which details are not available.

Consumption of eggs and egg products

Because of the operation of producers outside the control of the Egg Boards and the extent of 'back-yard' poultry-keeping, for which no statistics are collected, figures relating to total egg production must be accepted with some reserve. The production shown in the following table, together with details of exports and consumption, is based upon the records of Egg Boards of production from areas under their control, plus estimates of production from uncontrolled areas and from 'back-yard' poultry-keepers.

ESTIMATED PRODUCTION AND DISPOSAL OF EGGS IN SHELL AUSTRALIA, 1936-37 TO 1967-68

Period	*Change in stocks*	*Estimated total production*	*Exports(a)*	*For drying and pulping(b)*	*Apparent consumption in Australia*	
					Total	*Per head per year*
Average three years ended—	mil. doz	mil. doz	mil. doz	mil. doz	mil. doz	doz.
1938–39	−0.1	152.7	13.0	5.5	134.3	19.5
1948–49	+0.1	204.7	17.7	39.1	147.8	19.3
1958–59	+0.1	189.9	9.6	23.0	157.2	16.1
Year—						
1963–64	+1.1	210.6	4.3	21.0	184.2	16.7
1964–65	−0.2	225.5	4.2	31.9	189.6	16.8
1965–66	−0.3	228.1	4.7	27.2	196.5	17.1
1966–67	+0.2	237.8	5.3	31.3	201.0	17.2
1967–68	—0.3	253.3	6.5	42.3	204.7	17.2

(*a*) Includes ships' stores. (*b*) Includes wastage.

Details of the annual consumption of shell eggs, liquid whole egg and total shell egg equivalent per head of population are shown in the following table.

SUPPLIES OF EGGS AND EGG PRODUCTS AVAILABLE FOR CONSUMPTION: AUSTRALIA, 1936-37 TO 1967-68

(Per head per year)

Period	*Eggs in shell*	*Liquid whole egg and egg powder (a)*	*Total*	
			Number	*Weight (b)*
	number	number		lb
Average for three years ended—				
1938–39 . .	235	8	243	26.6
1948–49 . .	232	23	255	27.9
1958–59 . .	194	12	206	22.5
Year—				
1963–64 . .	200	13	213	26.6
1964–65 . .	202	15	217	27.1
1965–66 . .	205	15	220	27.5
1966–67 . .	206	13	220	27.5
1967–68 . .	206	17	223	27.9

(*a*) In terms of number of eggs in shell. (*b*) The average weight of an egg in Australia was taken as 1.75 oz for years prior to 1960–61. Since then the average weight has been taken as 2 oz, and figures from 1960–61 are therefore not strictly comparable with those for earlier periods.

Overseas trade in poultry products

Australian exports of shell eggs in 1967–68 amounted to 5,813,000 dozen compared with 4,451,000 dozen in 1966–67. The main outlets for Australian eggs in 1967–68 were the United Kingdom (1,035,000 dozen), Kuwait (1,028,000 dozen), Trucial States (713,000 dozen), and the Federal Republic of Germany (519,000 dozen).

EXPORTS OF POULTRY PRODUCTS: AUSTRALIA 1965–66 TO 1967–68

		Quantity			*Value ($'000 f.o.b.)*		
		1965–66	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
Eggs in shell	'000 doz	3,935	4,451	5,813	1,124	1,161	1,417
Eggs not in shell—							
In liquid form(*a*) .	'000 lb	14,484	18,226	27,021	3,280	3,224	4,202
Dry	'000 lb	257	100	144	189	77	81
Frozen poultry . . .	'000 lb	857	1,410	2,102	350	503	694
Poultry, live(*b*) . . .	number	323,601	276,259	167,060	79	69	42

(*a*) Includes frozen pulp. (*b*) Includes day-old chicks.

Imports of canned poultry in 1967–68 amounted to 247,000 lb, valued at $81,000, compared with 539,000 lb, valued at $146,000, in 1966–67.

The bee-farming industry

Production of honey and bees-wax

Although practised as a separate industry, bee-farming is also carried on in conjunction with other branches of farming. A feature of the industry is that it consists mainly of itinerant apiarists operating on a large scale with mobile equipment. Some of these apiarists move as far afield as from Victoria to Queensland in an endeavour to provide a continuous supplv of nectar from flora suitable for their bees. Production of honey in 1967–68 amounted to 43,958,000 lb (122.0 lb per productive hive) compared with 35,158,000 lb (110.2 lb per productive hive) in 1966–67. Bees-wax produced in 1967–68 was 609,000 lb compared with 477,000 lb in the previous year.

In the following tables, statistics for 1967–68 for each State are confined to apiarists with five or more hives, except in New South Wales where, since 1966–67, details relate to beekeepers with six or more hives. Prior to 1966–67, statistics for States other than Queensland related to beekeepers with five or more hives. In Queensland, details were confined to beekeepers on rural holdings with five or more hives and to beekeepers not on rural holdings with ten or more hives.

BEEHIVES, HONEY AND BEES-WAX: STATES AND A.C.T., 1967–68

State or Territory	*Beehives(a)*			*Honey produced*		*Bees-wax produced*	
	Productive	*Unproductive*	*Total*	*Quantity*	*Gross value*	*Quantity*	*Gross value*
	'000	'000	'000	'000 lb	$'000	'000 lb	$'000
New South Wales	137	41	177	21,014	1,839	281	174
Victoria	73	22	95	7,580	1,114	92	67
Queensland	44	23	66	4,116	371	66	38
South Australia	61	12	73	6,844	587	105	55
Western Australia	38	11	49	3,410	212	49	27
Tasmania	7	2	10	841	118	13	5
Australian Capital Territory	1	..	2	153	18	2	1
Australia	**360**	**111**	**472**	**43,958**	**4,259**	**609**	**367**

(*a*) At 30 June 1968.

The production of honey and bees-wax fluctuates considerably and is determined mainly by the flow of nectar from flora, particularly the eucalypts, which varies greatly from year to year.

HONEY AND BEES-WAX PRODUCTION: STATES AND A.C.T., 1936-37 TO 1967-68
('000 lb)

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*A.C.T.*	*Aust.*
				HONEY				
Average for three years ended—								
1938–39	3,005	3,107	700	2,874	1,299	200	3	11,188
1948–49	14,934	8,232	2,185	8,292	2,831	206	34	36,714
1958–59	12,853	7,239	2,071	5,924	6,548	398	44	35,077
Year—								
1963–64	15,135	9,460	2,053	9,722	8,510	632	135	45,647
1964–65	13,701	9,180	3,794	6,527	8,066	715	97	42,080
1965–66	7,343	9,608	1,472	9,929	10,923	630	80	39,985
1966–67	10,580	7,160	3,461	6,588	6,882	385	100	35,158
1967–68	21,014	7,580	4,116	6,844	3,410	841	153	43,958
				BEES-WAX				
Average for three years ended—								
1938–39	49	39	11	38	23	2	..	162
1948–49	174	86	36	110	34	3	..	443
1958–59	163	81	31	94	81	5	..	455
Year—								
1963–64	194	110	32	134	103	6	2	581
1964–65	185	105	52	90	106	10	1	549
1965–66	95	115	25	136	138	8	1	519
1966–67	137	88	52	93	99	7	1	477
1967–68	281	92	66	105	49	13	2	609

Honey levy

A levy is imposed on domestic sales of honey for the purpose of financing the operations of the Australian Honey Board. The current rate of levy, which became effective on 14 February 1966, is four-tenths of a cent per lb, but under the provisions of the *Honey Levy Act* 1962–66, it can be increased by regulation to a maximum of one cent per lb. The proceeds of this levy may be expended on the regulation of Australian exports of honey and on associated promotional and research activities. In 1965–66, 1966–67 and 1967–68 collections amounted to $101,000, $92,000 and $96.000 respectively.

Overseas trade in bee products

The principal importer of Australian honey in 1967–68 was the United Kingdom, accounting for 58.5 per cent, by value, of total exports.

Bees-wax was exported mainly to the United Kingdom and the Federal Republic of Germany in 1967–68.

EXPORTS OF HONEY AND BEES-WAX: AUSTRALIA, 1965-66 TO 1967-68

	Quantity ('000 lb)			*Value ($'000 f.o.b.)*		
	1965–66	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
Honey	16,234	13,050	n.a.	1,646	1,518	1,197
Bees-wax	238	598	471	104	299	321

Value of dairy, poultry and bee production, and indexes of price and quantum of production

Value of dairy, poultry and bee production

Values of dairy, poultry and bee-farming production for 1967–68 and earlier years are shown in the following tables. Further information on values, including definitions of the terms used, is given in the chapter Miscellaneous.

GROSS VALUE OF DAIRY, POULTRY AND BEE PRODUCTION: AUSTRALIA
1963-64 TO 1967-68
($'000)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
DAIRYING					
Whole milk used for—					
Butter(*a*)	152,750	157,989	154,862	165,635	134,089
Cheese(*a*)	27,456	30,119	25,603	33,345	31,148
Processed milk products	21,132	23,806	24,197	25,355	23,084
Other purposes	138,522	145,310	149,589	148,955	154,280
Subsidy paid on whole milk for—					
Butter	24,500	24,500	24,500	24,500	24,100
Cheese	2,500	2,500	2,500	2,500	2,900
Total, whole milk (including subsidy)	*366,860*	*384,224*	*381,250*	*400,289*	*369,602*
Pigs slaughtered	65,998	75,408	77,284	83,961	89,598
Dairy cattle slaughtered	30,664	45,624	49,438	39,563	44,849
Total, dairying	**463,522**	**505,256**	**507,973**	**523,814**	**504,050**
POULTRY					
Total, poultry	**138,182**	**137,425**	**154,603**	**174,451**	**172,488**
BEE-FARMING					
Honey	5,778	4,866	4,103	3,765	4,259
Bees-wax	250	253	224	224	367
Total, bee-farming	**6,028**	**5,119**	(*b*)**4,323**	(*b*)**3,992**	(*b*)**4,627**

(*a*) Excludes Commonwealth subsidy which is shown separately. (*b*) Discrepancy in addition due to rounding.

GROSS, LOCAL AND NET VALUE OF DAIRY, POULTRY AND BEE PRODUCTION STATES AND TERRITORIES, 1967-68

($'000)

State or Territory	*Gross production valued at principal markets*	*Marketing costs*	*Local value of production*	*Value of materials used in process of production*	*Net value of production (a)*
New South Wales	233,170	23,031	210,139	(*b*)67,009	143,130
Victoria	232,857	12,675	220,182	51,598	168,584
Queensland	96,860	7,989	86,871	29,551	59,320
South Australia	49,430	3,037	46,393	21,718	24,675
Western Australia	35,485	1,852	33,633	19,104	14,531
Tasmania	32,128	1,567	30,561	9,561	21,000
Northern Territory	369	2	367	n.a.	367
Australian Capital Territory	866	66	800	174	626
Australia	**681,165**	**50,219**	**630,946**	**198,715**	**432,233**

(*a*) No deduction has been made for depreciation and maintenance. (*b*) No allowance has been made for costs of power, power kerosine, petrol and other oils.

NET VALUE OF DAIRY, POULTRY AND BEE PRODUCTION(*a*) STATES AND TERRITORIES, 1963-64 TO 1967-68

Year	*N.S.W.(b)*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.(c)*
			NET VALUE ($'000)				
1963–64	131,838	152,640	57,018	23,604	12,714	18,116	396,870
1964–65	135,235	161,371	55,550	27,080	14,709	20,760	415,771
1965–66	132,732	164,782	53,413	27,556	16,926	19,741	416,003
1966–67	143,052	178,916	56,642	28,489	15,303	21,964	445,250
1967–68	143,130	168,584	59,320	24,675	14,531	21,000	432,233
			NET VALUE PER HEAD OF POPULATION ($)				
1963–64	32.32	49.67	35.75	23.06	15.92	49.94	35.89
1964–65	32.65	51.45	34.14	25.74	18.00	56.66	36.86
1965–66	31.53	51.59	32.18	25.47	20.22	53.41	36.17
1966–67	33.48	55.05	33.55	25.81	17.75	58.74	38.03
1967–68	32.93	51.05	34.53	22.07	16.28	55.36	36.24

(*a*) No deduction has been made for depreciation and maintenance. (*b*) No deduction has been made for costs of power, power kerosine, petrol and other oils. (*c*) Includes Northern Territory and Australian Capital Territory.

Indexes of quantum and price of dairy, poultry and bee production

For details of the methods of calculating these indexes and of the weights used *see* the chapter Miscellaneous.

INDEXES OF QUANTUM(*a*) AND PRICE OF DAIRY, POULTRY AND BEE PRODUCTION: AUSTRALIA, 1963–64 TO 1967–68

(*Base: Average* 3 *years ended June* 1939 = 100)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Quantum(*a*) of production—					
Milk	131	132	133	140	132
Other products	133	143	147	156	161
Total, dairy, poultry and bee . .	*131*	*136*	*138*	*145*	*141*
Per head of population . . .	81	83	82	85	81
Price—					
Milk	382	403	395	388	380
Other products	452	472	491	493	497
Total, dairy, poultry and bee . .	*402*	*423*	*422*	*418*	*413*

(*a*) Indexes of value at constant prices, i.e. quantities revalued at average unit values of base years 1936–37 to 1938–39.

CHAPTER 22

WATER CONSERVATION AND IRRIGATION

RESOURCES, UTILISATION AND NATIONAL AND INTERSTATE ASPECTS

Official Year Book No. 51, pages 228–31, contains a description of recent developments in the measurement of Australia's water resources. For information concerning general, descriptive and historical matter *see also* Year Book No. 37, pages 1096–1141.

An article on droughts in Australia appeared in Year Book No. 54, pages 991–6.

For further details on geographical and climatic features determining the Australian water pattern, *see* the chapter Physical Geography and Climate; on water supply and sewerage in metropolitan areas, cities and towns, the chapter Local Government; and on the generation of hydro-electric power, the chapter Electric Power Generation and Distribution, of this issue.

A series of maps showing the location of major dams and reservoirs and the various irrigation schemes operating in each of the States may be found on pages 259–65 of Year Book No. 46, and a map showing the extent of known artesian basins throughout Australia is shown on page 273 of Year Book No. 48.

Water resources and their utilisation

Surface supplies

An assessment of Australia's surface water resources has been made, based on measured and estimated stream flows within 197 river basins, as follows. The total average annual discharge of Australian rivers has been assessed at 280 million acre feet. This can be divided into 108 million acre feet measured discharge and 172 million acre feet estimated for areas where there are generally no gauging records. For the whole area of Australia (approximately 3 million square miles) only 1.9 million square miles are regarded as contributing to stream flow (i.e. there is practically no flow from Western Plateau drainage division and from arid parts of other divisions).

The flow of Australian rivers is small in comparison with the flow of rivers in other continents, some examples of which, expressed as mean annual discharges in millions of acre feet, are: Amazon, 2,950; Mississippi, 465; Mekong, 405; Niger, 308; Volga, 205; and the ten major rivers of the United States of America in the aggregate, 900.

Major dams and reservoirs

The table below lists existing major dams and reservoirs, together with those under construction and those projected, at June 1968. The list is confined to dams and reservoirs with a capacity of 100,000 acre feet or more. There are many others of smaller capacity in Australia.

MAJOR DAMS AND RESERVOIRS IN AUSTRALIA

Name	*Location*	*Capacity (acre feet)*	*Height of wall (feet)*	*Remarks*
	EXISTING DAMS AND RESERVOIRS			
Eucumbene	Eucumbene River, New South Wales	3,890,000	381	Part of Snowy Mountains Hydro-electric Scheme
Eildon	Upper Goulburn River, Victoria	2,750,000	260	Storage for irrigation and for the generation of electricity
Hume	Murray River, near Albury, New South Wales	2,480,000	142	Part of Murray River Scheme—storage for domestic stock and irrigation purposes. Hydro-electric power also developed
Menindee Lakes Storage	Darling River, near Menindee, New South Wales	2,000,000	..	Part of Darling River Water Conservation Scheme
Miena	Great Lake, Tasmania	1,710,000	60	Storage for Poatina hydro-electric power station
Warragamba	Warragamba River, New South Wales	1,670,000	379	For Sydney water supply. Also provides for generation of hydro-electricity and flood mitigation

MAJOR DAMS AND RESERVOIRS IN AUSTRALIA—*continued*

Name	*Location*	*Capacity (acre feet)*	*Height of wall (feet)*	*Remarks*
EXISTING DAMS AND RESERVOIRS—*continued*				
Burrendong	Macquarie River, near Wellington, New South Wales	1,361,000	250	Storage for rural water supplies
Blowering	Tumut River, New South Wales	1,320,000	368	For regulation of discharges from stations of Snowy Mountains Hydro-electric Scheme, primarily for irrigation but also for hydro-electric power generation
Burrinjuck	Murrumbidgee River, New South Wales	837,000	264	Storage for irrigation and production of hydro-electric power
Somerset	Stanley River, Queensland	735,000	173	Brisbane–Ipswich water supply, flood mitigation and small hydro-electric power station
Wyangala	Lachlan River, New South Wales	(*a*)560,000	(*b*)220	Storage for domestic, stock and irrigation purposes and for generation of hydro-electric power. (*See also* under Dams and Reservoirs under Construction)
Jindabyne	Snowy River, New South Wales	558,000	235	Part of Snowy Mountains Hydro-electric Scheme
Lake Victoria	Murray River, near South Australian border, in New South Wales	551,700	..	Natural off-river storage for irrigation in South Australia. Storage improved by construction of embankments and control regulators
Lake Echo	Lake Echo, Tasmania	442,000	60	Storage for Lake Echo, Tungatinah, Liapootah, Wayatinah and Catagunya hydro-electric power stations
Clark	Derwent River, Tasmania	434,000	220	Storage for Tarraleah, Liapootah, Wayatinah, and Catagunya hydro-electric power stations
Arthur Lakes	Source of Lake River, near Great Lake, Tasmania	410,000	50	Part of Great Lake hydro-electric power development
Keepit	Namoi River, near Gunnedah, New South Wales	345,000	177	For rural water supplies and hydro-electricity generation
Waranga	Goulburn River, Victoria	333,400	45	For irrigation storage
Tinaroo Falls	Barron River, North Queensland	330,000	136	For irrigation purposes in the Mareeba-Dimbulah area
Glenbawn	Hunter River, near Scone, New South Wales	293,000	251	Part of Hunter Valley conservation work, for irrigation and flood mitigation
Rocklands	Glenelg River, Victoria	272,000	93	Part of Wimmera-Mallee domestic and stock water supply system
Eppalock	Campaspe River, near Heathcote, Victoria	252,860	150	To supplement supply to Bendigo and for irrigation
Tantangara	Murrumbidgee River, New South Wales	206,000	148	Part of Snowy Mountains Hydro-electric Scheme
Avon	Avon River, New South Wales	(*a*)163,390	232	Part of Sydney water supply
Upper Yarra	Yarra River, Victoria	162,000	270	For Melbourne water supply
Glenmaggie	Gippsland, Victoria	154,300	121	Storage for irrigation
Lake St Clair	Central Highlands, Tasmania	154,200	..	Improved natural storage for Tarraleah hydro-electric power station
Wellington	Collie River, Western Australia	150,100	112	For supply of water to irrigation districts and to agricultural areas and country towns
Grahamstown	Grahamstown River, near Newcastle, New South Wales	147,000	35	To supplement supply to Newcastle and district
Koombooloomba	Tully River, North Queensland	146,000	123	For hydro-electric and irrigation purposes
Serpentine	Serpentine River, Western Australia	144,000	171	For Perth water supply
Lake Brewster	Lachlan River, near Hillston, New South Wales	123,900	..	Storage of rural water supplies for the lower Lachlan
Cairn Curran	Loddon River, Victoria	120,600	144	For irrigation storage
Rowallan	Mersey River, North Tasmania	110,000	140	Storage for Mersey Forth power development
DAMS AND RESERVOIRS UNDER CONSTRUCTION				
Gordon	Gordon River, South-west Tasmania	9,600,000	450	Storage for Gordon River power development
Ord River (main)	Near Wyndham, Western Australia	4,600,000	220	For irrigation, generation of hydro-electric power and flood mitigation (additional 6,000,000 acre feet flood control proposed)
Fairbairn Dam	Nogoa River, Central Queensland	(*c*)1,170,000	148	Storage for the Emerald Irrigation Area
Copeton	Gwydir River, New South Wales	1,100,000	373	For irrigation storage

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(*a*) Present (temporary) storage capacity. (*b*) Maximum height of water at wall. (*c*) Subject to final survey.

MAJOR DAMS AND RESERVOIRS IN AUSTRALIA—*continued*

DAMS AND RESERVOIRS UNDER CONSTRUCTION—*continued*

Name	*Location*	*Capacity (acre feet)*	*Height of wall (feet)*	*Remarks*
Wyangala . . .	Lachlan River, New South Wales	1,000,000	280	Strengthing and enlarging of existing dam for increased water supply and hydro-electric power generation. (*See also* under Existing Dams and Reservoirs)
Talbingo . . .	Tumut River, New South Wales	747,000	530	Part of Snowy Mountains Hydro-electric Scheme
Serpentine . . .	Serpentine River, south-west Tasmania	307,200	135	Storage for Gordon River power development
Scotts Peak . .	Huon River, south-west Tasmania		160	
Mokoan . . .	Winton Swamp, near Benalla, Victoria	300,000	35	For irrigation storage
Wuruma . . .	Nogoa River, Central Queensland	157,000	120	For irrigation storage
Eungella . . .	Broken River, North Queensland	106,000	130	Provision of cooling water for Collinsville power station, supply to Collinsville town and for irrigation purposes

DAMS AND RESERVOIRS PROJECTED

Name	*Location*	*Capacity (acre feet)*	*Height of wall (feet)*	*Remarks*
Chowilla(*a*) . .	Murray River, in South Australia, near Victorian border	(*a*)5,000,000	41	Regulation of the lower Murray River
Dartmouth(*a*) . .	Mitta-Mitta River in North-Eastern Victoria	3,000,000	590	Additional regulation of Upper Murray flow to secure River Murray irrigation development
Buffalo (second stage) .	Buffalo River, near Myrtleford, Victoria	800,000	260	For irrigation storage
Warkworth . .	Wollombi Brook, Hunter Valley, New South Wales	406,000	130	Flood mitigation and irrigation dam for Hunter Valley
Cardinia Creek . .	Near Emerald, Victoria .	220,000	260	For off river storage for Melbourne water supply
Pike Creek . .	Near Stanthorpe, Queensland	200,000	150	For irrigation, part of Dumaresq–Barwon Border Rivers Scheme
North Pine. . .	North Pine River, near Petrie, Queensland	164,000	125	To supplement supply to northern Brisbane area

(*a*) *See* page 933.

Irrigation

For some brief remarks on the history of irrigation in Australia *see* issues of the Year Book prior to No. 39. Trends in irrigation practice in more recent years were described in Year Book No. 37, page 1099.

AREA OF LAND IRRIGATED, STATES AND TERRITORIES, 1963–64 TO 1967–68

(Acres)

Season and crop	*N.S.W. (a)*	*Vic. (b)*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1967–68—									
Cotton . .	39,642	. .	8,502	. .	11,782	. .	. .	. .	59,926
Hops . . .	. .	(*c*)	. .	. .	(*d*)	1,587	. .	. .	(*e*)1,587
Orchards . .	35,313	46,616	(*f*)9,537	32,512	12,808	9,042	79	14	145,921
Rice . . .	76,082	. .	. .	. .	(*d*)	. .	40	. .	(*e*)76,122
Sugar-cane . .	(*c*)	. .	141,087	. .	. .	. .	. .	. .	(*e*)141,087
Tobacco . .	n.a.	n.a.	11,833	. .	. .	. .	. .	. .	(*e*)11,833
Vegetables . .	18,497	34,169	40,576	13,290	10,148	17,303	170	116	134,269
Vineyards . .	15,658	47,534	(*g*)	30,616	634	. .	. .	. .	(*e*)94,442
Other crops (including fodder and fallow land)	452,077	136,743	99,771	33,138	2,992	9,132	118	744	734,715
Total, crops .	*637,269*	*265,062*	*311,306*	*109,556*	*38,364*	*37,064*	*407*	*874*	*1,399,902*
Pastures . .	715,224	1,036.243	41,154	63,622	35,116	29,182	506	243	1,921,290
Total, 1967-68 .	**1,352,493**	**1,301,305**	**352,459**	**173,178**	**73,480**	**66,243**	**913**	**1,117**	**3,321,188**
1966–67 . . .	1,440,781	1,313,888	344,052	138,757	70,627	47,225	890	1,154	3,357,374
1965–66 . . .	1,308,439	1,262,661	332,534	128,835	67,407	45,196	771	1,125	3,146,968
1964–65 . . .	1,198,404	1,189,055	281,173	123,139	63,035	34,322	587	1,120	2,890,835
1963–64 . . .	1,060,479	1,137,241	252,082	117,870	55,194	33,570	973	1,081	2,658,490

(*a*) *Source:* Water Conservation and Irrigation Commission. (*b*) *Source:* State Rivers and Water Supply Commission. (*c*) Not available separately; included in Other crops. (*d*) Not available for publication; included in Other crops. (*e*) Incomplete, *see* individual States. (*f*) Includes vineyards. (*g*) Included with Orchards.

Irrigation research

Comprehensive programmes of research and investigation are being pursued by State water and agricultural authorities and the Commonwealth Scientific and Industrial Research Organization, often in collaboration. Special attention is being given to the following: high water tables due to the application of water; surface accumulation of salt and other soil changes associated with irrigation; methods of applying water efficiently; soil treatments to improve the physical condition of irrigated heavy clay soils; the utilisation of irrigated pastures by stock; and growth problems affecting plants and trees.

Irrigation is studied by the Commonwealth Scientific and Industrial Research Organization at a number of its research stations and laboratories, the principal one being the Division of Irrigation Research at Griffith (New South Wales), where investigations are concerned with limiting the degradation of land by irrigation, improving the quality and range of irrigated crops, and assessing the amount of water required by irrigated crops and the most economical means of applying it. The crops being studied include citrus, cotton, rice and lucerne. The Organization's Division of Plant Industry studies irrigated pastures at Deniliquin (New South Wales) and Canberra (Australian Capital Territory), and tobacco at Mareeba (Queensland). At Adelaide (South Australia) and Merbein (Victoria) the Division of Horticultural Research is working on problems of the dried-fruit industry and on wine grapes and pome-fruit. The Division of Land Research conducts research on rice at the Coastal Plains Research Station, Darwin (Northern Territory), and on a number of irrigated crops, including rice, safflower, linseed, and cotton, at the Kimberley Research Station (Western Australia). The Division has also carried out a number of hydrological investigations in connection with the utilisation of underground water for irrigation. The Division of Soils and the Division of Soil Mechanics are studying methods of reducing seepage from earthen dams, and take part in the examination of the physical properties of sediments beneath proposed dam sites. The Division of Soils is also looking at underground water movement and the water balance in the south-east of South Australia, and at the drainage and soil moisture regime of the irrigated swamps of the lower Murray River.

The Irrigation Research and Extension Committee plays an important part in the agricultural activity of the Murrumbidgee Irrigation areas and associated districts, and the Coleambally Irrigation Area. It is representative of the New South Wales Department of Agriculture, the Commonwealth Scientific and Industrial Research Organization, the Rural Bank of New South Wales, the Soil Conservation Service of New South Wales, the Water Conservation Service of New South Wales, the Rice Marketing Board of New South Wales, the Wine Grape Marketing Board of New South Wales, co-operative and secondary industries, and farmers' organisations. Finance is provided by these authorities on an agreed basis. The objectives are: to enable the agricultural extension services to the farmers in the defined sub-region to be continued and developed; to provide a system for advising on local agricultural policy and organisation; to provide means for farmer opinion to have due weight in the consideration of regional agricultural administration and policy; to achieve a unified approach to sub-regional extension in all branches of agriculture; to advise on the research needs of the sub-region and to co-ordinate the agricultural research of the various rural institutions working therein; to achieve close liaison between research and extension; and to conduct research in extension methods.

Two other organisations with similar objectives are the Victorian Irrigation Research and Promotion Organisation which operates from Shepparton, and the Murray Research and Extension Committee centred at Deniliquin.

Preservation of catchments

Since water conservation commences on the catchments it is becoming increasingly recognised that anything which interferes with catchment efficiency affects the quantity of water available for all purposes. Active steps are being taken to counteract soil erosion, to conserve soil generally, and to minimise the effects of floods, overstocking, bush fires, and the destruction of vegetative cover. All States and the Commonwealth have initiated forestry policies which provide for reforestation and the preservation of catchments. In recent years efforts to counteract soil erosion have been intensified, and there is some evidence of a more unified approach to catchment, water, forestry, and land use factors regarded as parts of a single problem.

Sub-surface supplies

Much of Australia's underground water is obtained from artesian and sub-artesian basins and is used for stock purposes and domestic use. These supplies are indispensable in the dry areas which comprise most of the inland and extensive coastal areas as well. The quality of water ranges from usable to very saline.

Considerable use is also made of sub-surface water, other than pressure water, from localised groundwater basins, particularly in the well-settled areas. The water is used mainly for domestic and stock purposes. Compared with other countries with similar rainfall and climate, underground water is not used extensively for town and individual industrial supplies and irrigation, but its use for these purposes is increasing.

Artesian and sub-artesian supplies. Pressure water (either artesian or sub-artesian), variable in quantity and quality, is obtainable in many parts of Australia, the various artesian basins extending over about half the continent. A map of Australia showing the extent of the known artesian basins appears on page 273 of Year Book No. 48.

The Great Artesian Basin, the most extensive in the world, underlies an area of approximately 676,250 square miles, comprising about 421,000 in Queensland, 135,000 in South Australia, 81,250 in New South Wales and 39,000 in the Northern Territory. A table setting out the principal defined water-bearing basins in Australia appears on page 1001 of Year Book No. 53.

More than 18,000 artesian bores have been drilled within the Great Artesian Basin, while the daily free discharge from all bores continuing to flow in Australia has been stated as exceeding 350 million gallons, of which the loss by evaporation and seepage has been estimated at more than 90 per cent. Sub-artesian bores and wells throughout Australia number more than 200,000.

Artesian water generally is good stock water, but most is unsuitable for plant life; in certain areas sub-artesian waters are suitable for all uses. Some of these areas are in the Canning, Murray, Georgina and Barkly, Perth, Ord-Victoria, Pirie-Torrens and Adelaide Basins. In the Eucla Basin and parts of the Murray and Pirie-Torrens Basins the water is of poor quality, being barely suitable for stock.

In common with other countries possessing artesian supplies, Australia has been faced with the problem of flow diminution. It was recognised early that flows were diminishing as more bores were drilled, but it is now considered that while many of these bores will ultimately cease to flow, others will assume a perpetually steady rate of flow, corresponding with the average recharge from rainfall absorbed by permeable outcrops, mainly sandstone and limestone. Diminution in flows from artesian bores has emphasised the need to eliminate wastage as much as possible. Licences now issued for the construction of new artesian bores prohibit the distribution of water through drains, channels, etc., and the supplies must be confined to the borehead or piped to appropriate watering points.

Shallow groundwater. Shallow groundwater supplies are used in various parts of Australia for industry, irrigation, stock, and domestic purposes. Two examples of the use of these shallow supplies for industrial and domestic purposes occur in New South Wales. The Hunter District Water Board pumps up to 15 million gallons a day (average use over 30 years is 9.2 million gallons per day) for general use from the Tomago coastal sands near Newcastle, and at Botany, Sydney, private industry pumps 8–10 million gallons a day for its own use from similar sands. Exploration of the coastal sands north of the Tomago Sands has revealed a further potential production of 25 million gallons a day. Examples of the use of shallow groundwater supplies for irrigation include the Burdekin Delta and the Bundaberg area in Queensland. In the Burdekin Delta, which covers an area of some 200 square miles, the present extraction for irrigation from underground sources is in the region of 200,000 acre feet per annum (about 150 million gallons a day) and in the Bundaberg area it is approximately 50,000 acre feet per annum (about 37 million gallons a day).

Schemes for artificial recharge of underground supplies have been implemented on both sides of the Burdekin River delta. Diversions from unregulated river flows of 61,000 acre feet per annum to the north side and of 40,200 acre feet per annum (when available) to the south side have been authorised.

In recent years there has been a marked increase, particularly in Queensland, New South Wales and Victoria, in investigation into the groundwater resources of river and coastal alluvium for irrigation and town water supplies.

National and interstate aspects

In terms of the Commonwealth Constitution primary responsibility for control and conservation of water rests with the individual State Governments. The Commonwealth Government is responsible for matters relating to water in its Territories. However, because political boundaries sometimes intersect river valleys and underground water basins, co-operation between Governments has been necessary to develop resources in certain cases. Specific examples of Commonwealth-State and interstate co-operation and approach are given in the following paragraphs.

Australian Water Resources Council

The Australian Water Resources Council was established by joint action of the Commonwealth and State Governments in 1962. The council comprises Commonwealth and State Ministers primarily responsible for water resources, with the Commonwealth Minister for National Development as Chairman, and is serviced by a Standing Committee consisting mainly of the heads of Departments responsible to these Ministers, and by a number of technical committees.

The primary objective of the Council is the provision of a comprehensive assessment on a continuing basis of Australia's water resources, and the extension of measurement and research to provide a sound basis for the planning of future development.

In terms of its main objective, the Council in 1964 recommended, and the Commonwealth and State Governments agreed, that there should be an accelerated programme of establishment of stream gauging stations and investigation of underground water. The Commonwealth Government agreed to contribute a total of up to $2,750,000 for the first three years of what was envisaged as a ten-year programme. The Commonwealth contribution for the current three-year period, which began in 1967-68, will be up to $4,500,000. In the first three years the States spent about $8,000,000 from their own financial resources, and expenditure in excess of this amount is expected in the current three years.

The Council has also given attention to the collation of available data on Australia's water resources, and in 1965 a *Review of Australia's Water Resources* (*Stream Flow and Underground Resources*) *1963* was published. This document was the first official assessment of surface and underground water resources. Four groundwater maps with an explanatory booklet are to be published in 1970. In 1967 a catalogue *Stream Gauging Information, Australia, June 1965* was published on behalf of the Council by the Department of National Development. The 1966 and 1967 annual supplements to this catalogue have been issued. Water authorities have also agreed to publish stream flow records at five-yearly intervals. The Council continues to support Australian participation in the programme of the International Hydrological Decade (1965–1974). An important contribution will follow from the decision of the Council to select one hundred representative basins throughout Australia for detailed hydrological studies.

Studies of the requirements and facilities for education in the water resources field have been undertaken by the Council. Research studies in progress on a number of topics requiring urgent attention are being published in a new Australian Water Resources Council Hydrological Series, the first volume of which is *A Survey of Water Desalination Methods and their Relevance to Australia*, published in 1966.

The Commonwealth Government is providing $130,000 in 1968–69 for a new programme of water research which complements research already undertaken by Commonwealth agencies, universities and other organisations. The Water Resources Council has approved fifteen water research projects in this programme which covers topics of special concern to authorities involved in the investigation and development of water resources.

National Water Resources Development Programme

In developing water resources, the Commonwealth Government's role in the past, while important, had been confined to assisting special projects or areas, e.g. the Snowy Mountains Scheme, participation in the River Murray Commission, and financial support for individual State projects such as the Ord River project. However, the National Water Resources Development Programme, announced in November 1966, represents a very important move towards closer collaboration between State and Commonwealth Governments, and a more continuing and detailed involvement by the Commonwealth in the development of Australia's water resources.

Under the National Water Resources Development Programme the Commonwealth has undertaken to provide grants to the States amounting to a total of about $50,000,000 over the next five years for water conservation works aimed at reducing the hazards of droughts and expanding primary production. The first two grants under this Programme were announced late in 1967. For the Emerald irrigation project in central Queensland, the Queensland Government is to receive a non-repayable grant of up to $20,000,000 for the construction of the dam, with the State financing the irrigation, drainage, and associated works. Grants totalling $3,600,000 were provided for two Victorian schemes to reduce salinity levels in the Murray River. These works were constructed in time for the 1968–69 irrigation research.

Proposals submitted by the States are examined by the Commonwealth to determine which are suitable, from a national point of view, for inclusion in the Programme, and accordingly grants will be announced from time to time.

Murray River scheme

The Murray River and its tributaries form the largest river system in Australia. The catchment is approximately 408,000 square miles, or one-seventh of the area of the Australian continent, comprising five-sixths of New South Wales, over one-half of Victoria, one-sixth of Queensland and approximately one-fourteenth of South Australia. The Murray proper is 1,600 miles long. Its main tributaries are the Darling (1,700 miles), the Murrumbidgee (980 miles), and the Goulburn (350 miles). The average annual flow of each of the chief contributory streams is as follows: Upper Murray, including the Mitta Mitta and Kiewa Rivers, 3,820,000 acre feet; Darling River, 2,820,000 acre feet; Goulburn River (including Broken River), 2,580,000 acre feet; Murrumbidgee River, 2,050,000 acre feet; and Ovens River, 1,266 000 acre feet. Irrigated production in the Murray River Basin is mainly grapes for wine, dried fruits, fresh fruits, rice, vegetables, dairy produce wool, and fat lambs.

River Murray Waters Agreement. For a brief summary of historical events leading up to the River Murray Agreement (1915) by the Governments of the Commonwealth, New South Wales, Victoria, and South Australia *see* issues of the Year Book prior to No. 39. Under the Agreement construction works are carried out by the States (which are also responsible for maintenance) subject to the approval and direction of the River Murray Commission. The Agreement provides that the minimum quantity of water to be allowed to pass for supply to South Australia in each year shall be sufficient to maintain certain specified flows in the lower river varying from 47,000 acre feet a month in the winter months to 134,000 acre feet a month in the four summer months of maximum demand—the total amounting to 1,254,000 acre feet over twelve months. The flow at Albury is shared equally by New South Wales and Victoria, and each of these States has full control of its tributaries below Albury, subject in each case to the fulfilment of the South Australian allocation. For a brief outline of the operation of the Agreement prior to 1949 *see* Year Book No. 40, page 1065, and earlier issues.

At a conference of Ministers held in 1949 to consider the diversion of the Snowy River it was decided that, by diversion of streams in the Snowy Mountains area, an average of approximately 440,000 acre feet per annum would be added to the Murray River (*see* Snowy Mountains Hydro-electric Scheme, page 935) and that increased storage should be provided in order to give additional regulation of the Murray River itself as well as to provide for regulation of the diverted waters. Hydro-electric potentialities would also affect the size of the storage.

The River Murray Commission investigated the position and subsequently recommended to the contracting Governments that the River Murray Waters Agreement be amended to provide for enlargement of the Hume Reservoir by 500,000 acre feet to approximately 2,500,000 acre feet. A conference of Ministers in 1954 agreed to the enlargement, and it was also agreed that the Commission should be given power to construct regulators and to carry out such other work on the Murray River between Tocumwal and Echuca as it considered necessary to reduce the losses from the regulated flow in that stretch of the river. The amended Agreement was ratified in the Parliaments of the Commonwealth and the three States and was proclaimed on 7 April 1955. In view of the proposed diversions by the Snowy Mountains Authority to and from the Murray River, and for other reasons, amendments to those sections of the River Murray Waters Agreement dealing with the distribution of the waters of the Murray were considered desirable. Following ministerial conferences, amendments were ratified by the four Parliaments concerned, and came into force on 6 November 1958.

Further amendment of the Agreement to provide for the construction of a storage of approximately 5,000,000 acre feet capacity at Chowilla in South Australia was ratified by legislation in the Commonwealth and State Parliaments and came into force on 30 April 1964. However, in view of the greatly increased cost by the time the project came to tender in 1967 and other significant factors (including water quality in the Lower Murray) which had arisen in the interim, the River Murray Commission resolved that, pending further investigations, construction of Chowilla Dam should be deferred. Further investigations then followed, including a re-assessment of the likely yield from both Chowilla and alternative storages on the Upper Murray and Mitta-Mitta Rivers.

Following careful consideration of this re-assessment, the River Murray Commission in February 1969 agreed that a 3,000,000 acre feet storage at Dartmouth on the Mitta-Mitta River provided the greatest overall benefits in terms of cost and yield and should be the next development of the resources of the River Murray. The question of sharing the benefits could not be resolved by the Commission and was therefore referred to the respective Governments. Subsequently, Ministers representing the four Governments concerned met in March 1969 and agreed on conditions for the construction of the Dartmouth Project and for the sharing of the increased system yield between Victoria, New South Wales and South Australia. Among other things, the meeting of Ministers agreed to continue the Menindee Lakes Agreement (due to expire on 31 December 1969) in perpetuity.

The Commonwealth Government has offered to assist the three States with financing the project by way of a loan to the extent of 50 per cent of each State's contribution. At the same time the Commonwealth itself will make its own quarter contribution of the cost of the project.

Before work can proceed with detailed design and construction, it is necessary that each of the four Parliaments ratify appropriate amendments to the River Murray Waters Agreement.

The year 1967–68 was a period of severe drought, during which restrictions were imposed by the River Murray Commission on deliveries of water. The quantities (in acre feet) diverted from the River Murray and its tributaries were as follows: New South Wales, 3,324,000; Victoria, 2,562,000; South Australia, 477,000; a total of 6,363,000 acre feet.

River Murray Works. One of the major works of the Murray River scheme is the Hume Reservoir, situated just below the junction of the Murray and Mitta Mitta Rivers, ten miles above Albury, forming a lake of 50,000 acres. The design comprises a mass concrete spillway and outlet works extending for 1,000 feet, and an earthen embankment 142 feet high extending for 4,000 feet across the river flats, the length of the total structure being approximately one mile. Work on the enlargement of the reservoir to its approved capacity of 2,480,000 acre feet was completed in 1961.

The Yarrawonga Diversion Weir, which was completed in 1939, raised the river level so that water could be diverted by gravitation into main channels constructed on either side of the river. Between the Yarrawonga Weir and the Murray mouth, thirteen weirs and locks have been built. Two flood diversion weirs have been constructed on the Murrumbidgee—one between Hay and the Lachlan junction and the other below the Lachlan junction.

The Mulwala Canal, supplied from the Yarrawonga Weir, has an off-take capacity of 2,500 cubic feet a second, serving 1,800,000 acres of land in New South Wales. The Yarrawonga Channel, on the Victorian side, has an off-take capacity of 1,250 cubic feet a second, serving 300,000 acres. Not all of this area is irrigated.

Adjoining the river in New South Wales, and 35 miles from the Murray-Darling junction, Lake Victoria storage, with a surface area of 27,670 acres, was completed in 1928. The water released from Lake Victoria is used by the South Australian settlements. The inlet channel to Lake Victoria was enlarged in 1957 to permit greater diversion of periodical flood flows of short duration.

Five barrages across channels near the Murray River mouth connecting Lake Alexandrina with the sea were completed in 1940 to prevent ingress of salt water to Lakes Alexandrina and Albert and to the lower river, thereby increasing the productivity of adjacent lands. The structures maintain a sufficiently high level for 50 miles up river to permit watering by gravitation of a considerable area of reclaimed river flats. The total distance across the barrages and intervening islands is 15 miles.

In addition to the works carried out under the auspices of the Commission, the separate States have constructed thousands of miles of distribution channels and have provided a number of storages on the tributaries, thereby contributing materially to the large amount of irrigation development in the Murray Basin. The main storages are: New South Wales—Menindee Lakes Storage (Darling), Burrinjuck (Murrumbidgee), Keepit (Namoi), Burrendong (Macquarie), and Wyangala (Lachlan); Victoria—Eildon (Goulburn), Waranga (Goulburn), Eppalock (Campaspe) and Cairn Curran (Loddon). Details of these and other State works on Murray tributaries will be found in the sections dealing with State systems. No storages exist on the Murray in South Australia at present, and the proposed construction of a storage at Chowilla has been deferred.

New South Wales-Queensland Border Rivers Agreement

The catchments for the border streams of New South Wales and Queensland (2,000 square miles) extend to the granite areas in the vicinity of Tenterfield (New South Wales) and Stanthorpe (Queensland), and elevation rises to 3,000 feet. Average rainfall is 30 inches. The catchments and the areas suitable for irrigation are approximately equal in each State. Climatic conditions are such that from April to October it is necessary to supplement rainfall by irrigation to stabilise and increase production. The capacity of the area to grow lucerne and tobacco under irrigation has already been demonstrated. Other possible development of the area includes irrigation of cotton, root crops, cereals, and citrus fruit, and expansion of the fat stock industry.

The New South Wales-Queensland Border Rivers Agreement came into effect on 1 July 1947. The Agreement provides for the construction of certain works on those sections of the Severn, Dumaresq, MacIntyre, and Barwon Rivers which constitute part of the boundary between New South Wales and Queensland for the furtherance of water conservation, water supply and irrigation in those States.

The works to be constructed comprise a dam on the Dumaresq River at a site to be selected by the Water Conservation and Irrigation Commission of New South Wales (the constructing authority) to give a storage basin with a capacity as large as is reasonably practicable and not less than six nor more than twelve weirs as may be found necessary to meet the requirements of irrigation along the rivers. Provision is also made for the construction of not more than four regulators in the effluents from the barrier rivers and for the taking over of the existing weir on the MacIntyre River at Goondiwindi and the existing weir on the Barwon River at Mungindi (the Irrigation and Water Supply Commission of Queensland is the constructing authority for new weirs and regulators). The cost of these works and of administration are to be borne by the States in equal shares. The Agreement further provides that the water discharge from the Dumaresq storage, whether by regulated or unregulated flow, shall be available to the two States in equal shares.

After unfavourable foundation conditions were disclosed at several dam sites on the Dumaresq River, investigations were extended to tributary streams, and superficially suitable sites located on Pike Creek and the Mole River. A geophysical survey was made at each of these sites and preliminary comparative estimates were prepared to determine the relative economy of providing one large storage at Mingoola or two smaller storages on the tributaries. Following exploratory drilling of the tributary sites, a report dealing with alternative storage proposals and possible amendments to the existing Agreement was submitted to the participating States. Consequent upon these investigations an Amending Agreement was executed between the States of New South Wales and Queensland which included, *inter alia*, provision for the construction of storages on Pike Creek (Queensland) and the Mole River (New South Wales). The new agreement also provided for investigation and construction of works for the improvement of flow and of the distribution of flow in streams which intersect the New South Wales-Queensland border west of Mungindi.

Works completed under the original agreement include Bonshaw and Cunningham Weirs on the Dumaresq River, a weir and regulator on the Barwon River at the off-take of the Boomi River, and a low level weir to establish a pumping pool at Glenarbon on the Dumaresq River. The existing Goondiwindi and Mungindi Weirs are being maintained, operated and controlled by the Queensland Irrigation and Water Supply Commission. Until a dam has been constructed it is unlikley that any other weirs will be required.

Snowy Mountains Hydro-electric Scheme*

Following a comprehensive investigation into both the water and power potential of the Snowy River waters by a Technical Committee representative of the Commonwealth and the States of New South Wales and Victoria in 1947 and 1948, and the submission by the Committee of reports in 1948 and 1949, the Commonwealth Parliament passed the *Snowy Mountains Hydro-electric Power Act* 1949 setting up an Authority to implement the proposals agreed upon.

The basis of the proposals was to impound the Snowy River waters at high elevations and, by diverting them into tunnels passing under the Alps, to use their potential power for the generation of electricity and then to discharge them into the Murray and Murrumbidgee River systems for use in the irrigation areas.

The scheme involves two main diversions, that of the Eucumbene, a tributary of the Snowy, to the Upper Tumut River, and that of the main stream of the Snowy River at Island Bend and Jindabyne to the Swampy Plain River. In addition, works required to make use of the waters of the Upper Murrumbidgee, the Upper Tumut, the Upper Tooma and the Geehi Rivers for power generation also provide additional regulation of these streams, and this makes more water available for irrigation. Details of the two trans-mountain diversions and the associated power works together with details of progress and construction are given in the chapter Electric Power Generation and Distribution.

When all works are completed, it is estimated that the total gain by diversion and regulation will amount to 1,120,000 acre feet per annum to the Murrumbidgee and 800,000 acre feet per annum to the Murray. This additional water should be sufficient to provide irrigation for approximately 1,000 square miles of land, which is expected to result in a substantial increase in primary production.

International aspects

Australia maintains contact with international developments in water conservation and irrigation through its membership, since 1952, of the International Commission on Irrigation and Drainage. This Commission was set up in India in 1950 in order that the technical experience of all countries might be pooled for the benefit of all, and to promote the development and application of the science and technique of irrigation and drainage in the engineering, economic and social aspects. The Commission is constituted of National Committees of participating countries, and fifty-nine countries, including Australia, have so far been admitted to membership.

The Central Office of the International Commission on Irrigation and Drainage in situated in New Delhi, India. Congresses, which are held every three years, have taken place in India, Algeria, the United States of America, Spain, Japan, in that order and again in India in 1966. The seventh Congress was held in Mexico in April 1969.

An Australian National Committee was established following a meeting of representatives of Australian authorities held in Melbourne in 1953. At that meeting it was decided, *inter alia*, 'that a National Committee should be formed and that the National Committee would consist of representatives of Government Departments, Statutory Authorities, firms, and individuals actively interested in irrigation and drainage'. The Committee meets annually.

STATES AND TERRITORIES

The foregoing text deals with water conservation and irrigation in Australia generally and with international, national and interstate aspects. The following survey covers the local pattern of water resources and the steps taken by the State Governments to bring about their development. In the various States water policies tend to assume a distinctive and characteristic pattern closely allied with climatic conditions and specific local needs.

In Victoria almost every form of water scheme is in operation. In New South Wales major emphasis at present is on irrigation and stock development in the dry areas along the Murray and Murrumbidgee Rivers, though a substantial scheme of intensive irrigation is being conducted in the Murrumbidgee Irrigation Areas. In Queensland, up to the present, the predominant emphasis has fallen on water (mainly underground sources) for stock, and the development of small irrigation schemes in sub-humid and humid areas, especially to stabilise sugar production. Apart from regular irrigation practices along the Murray River, South Australian authorities are vitally concerned with reticulated supplies for rural areas and towns. Western Australia has developed unique rock catchments and piped supplies for agricultural areas and towns in dry districts. Tasmanian interest relates almost exclusively to hydro-electric generation. The Northern Territory is concerned primarily with stock supplies and the safeguarding of long stock routes.

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* *See also* the chapter Electric Power Generation and Distribution. For more detailed information *see* special article by the then Commissioner, Snowy Mountains Hydro-electric Authority (Sir William Hudson) which appeared in Chapter XXIX. Miscellaneous of Year Book No. 42.

New South Wales

On page 1110 of Year Book No. 37 information is given on the pattern of rainfall and the history of irrigation in New South Wales. (*See also* the chapter Physical Geography and Climate of this issue.)

Administration

The Water Conservation and Irrigation Commission of New South Wales consists of three members appointed by the Governor. The operations of the Commission cover water conservation, control of irrigation areas, the establishment, operation and maintenance of works for domestic and stock water supply, irrigation districts, flood control districts, sub-soil drainage districts, constitution of water trusts, the issue of licences for private irrigation, artesian and shallow boring, assistance under the provisions of the farm water supplies scheme, and river improvement works.

Under the Water Act, 1912–1955 the right to the use and flow and the control of water in all rivers and lakes which flow through, or past, or are situated within, the land of two or more occupiers, is vested in the Commission for the benefit of the Crown. A system of licences operates for the protection of private works of water conservation, irrigation, water supply, drainage and prevention of inundation.

For particulars of the New South Wales–Queensland Border Rivers Agreement ratified by Acts of both States in 1947, *see* page 934 of this chapter.

Schemes summarised

The bulk of irrigated land is along the Murray and its tributary the Murrumbidgee. Smaller areas are served by the Wyangala Dam, Lake Cargelligo and Lake Brewster on the Lachlan (a tributary of the Murrumbidgee), by Glenbawn Dam on the Hunter River, by Keepit Dam on the Namoi River, by Burrendong Dam on the Macquarie River, and by the Menindee Lakes Storage on the Darling River. None of the other rivers is regulated by large head storages, though weirs and dams have been provided for town supplies, etc. in many places. A head storage on the Tumut River near Tumut is nearing completion and preliminary establishment work at Copeton Dam site on the Gwydir River commenced on 14 February, 1968. In addition, substantial use is made of artesian and sub-artesian water in pastoral areas.

New South Wales legislation provides for the constitution and control of various schemes having different characteristics and including irrigation areas, irrigation districts, water trust districts, flood control and irrigation districts, and river improvement districts. There are nine irrigation areas, although two of these, Yanco and Mirrool, are generally described under the one heading, namely, the Murrumbidgee Irrigation Areas. The Areas are: The Murrumbidgee Irrigation Areas, consisting of 451,263 acres served with water through a channel system stemming from the river at Berembed Weir; the Coomealla Irrigation Area of 34,626 acres, served by pumping from the Murray; the Curlwaa Irrigation Area of 10,393 acres, supplied from the Murray by pumping; the Hay Irrigation Area of 6,850 acres, supplied with water pumped from the Murrumbidgee; the Tullakool Irrigation Area of 18,006 acres, supplied from the Edward River by diversion at Stevens Weir; the Buronga (8,739 acres) and Mallee Cliffs (1,900 acres) Irrigation Areas, served by pumping from the Murray; and the Coleambally Irrigation Area (177,509 acres), served by diversion from the Murrumbidgee River. All these Areas are administered by the Commission, and details of the various schemes are given in the table on page 937.

The capacities of the main storages for irrigation in New South Wales (in acre feet) are:

Darling—Menindee Lakes Storages (2,000,000);

Murray—Half share of Hume Reservoir, weirs and locks to Wentworth (1,351,570); Stevens Weir, Edward River (7,165);

Macquarie—Burrendong Dam (964,000 irrigation storage; 397,000 flood mitigation storage);

Murrumbidgee—Burrinjuck Dam (837,000); Berembed Weir (10,000); Redbank Weir (7,360); Maude Weir (6,740);

Namoi—Keepit Dam (345,000);

Lachlan—Wyangala Dam (temporary capacity 560,000); Lake Brewster (123,900); Lake Cargelligo (29,435); Jemalong Weir (2,200);

Hunter—Glenbawn Dam (185,000 acre feet irrigation storage; 108,000 acre feet flood mitigation storage); and

Snowy Mountains Hydro-electric Scheme—Lake Eucumbene (3,890,000); Blowering Dam (1,320,000); Jindabyne Reservoir (558,000); Tantangara Dam (206,000).

The total length of supply channels, drains, escape channels and pipe lines constructed by the Water Conservation and Irrigation Commission in New South Wales is 4,997 miles. This comprises 3,433 miles of supply channels (including main canals), 1,495 miles of drains and escape channels, and 69 miles of pipe lines.

Extent of systems and nature of irrigated culture

The following table shows the areas of the various irrigation systems and the areas irrigated in 1967–68 and corresponding particulars for the State as a whole during the seasons 1963–64 to 1967–68.

AREAS OF SYSTEMS AND OF LAND IRRIGATED: NEW SOUTH WALES 1963-64 TO 1967-68

(*Source:* Water Conservation and Irrigation Commission)

(Acres)

		Area irrigated(a)									
				Fodder crops							
Season and system	*Total area*	*Rice*	*Other cereals grown for grain*	*Lucerne*	*Other*	*Pastures*	*Vineyards*	*Orchards (b)*	*Vegetables*	*Fallow land and miscellaneous*	*Total*
1967–68—											
Irrigation Areas—											
Murrumbidgee (within the Areas)	451,263	35,674	57,868	7,409	4,203	90,954	6,829	19,914	3,456	11,481	237,788
Lands adjacent supplied under agreement	n.a.	..	655	176	559	747	..	105	17	..	2,259
Coleambally	177,509	13,771	26,815	1,833	1,391	46,487	58	72	251	479	91,157
Hay	6,850	..	386	..	..	2,067	..	..	..	..	(c)2,453
Tullakool	18,006	1,169	582	280	130	6,573	..	..	..	170	8,904
Coomealla	34,626	..	..	3	..	..	5,081	1,874	..	..	6,958
Curlwaa	10,393	..	..	..	250	..	399	1,287	..	..	1,936
Buronga	8,739	..	..	..	..	..	259	546	..	..	805
Mallee Cliffs	1,900	..	..	82	..	..	169	178	..	..	429
Total, Areas	*(d)709,286*	*50,614*	*86,306*	*9,783*	*6,533*	*146,828*	*12,795*	*23,976*	*3,724*	*12,130*	*352,689*
Irrigation Districts—											
Benerembah	112,818	6,606	17,162	1,369	1,392	31,835	..	..	321	3,054	61,739
Wah Wah	589,975	..	8,670	1,671	1,004	9,672	..	..	..	775	21.792
Tabbita	32,330	445	2,793	565	120	4,745	..	..	..	290	8,958
Gumly	353	..	65	52	..	66	..	20	32	17	252
Berriquin	804,966	955	56,123	21,855	4,306	245,453	..	..	314	11,127	340,133
Wakool	506,043	8,838	9,595	1,227	1,268	62,338	..	..	..	915	84,181
Deniboota	338,421	5,657	8,157	2,406	586	33,983	..	..	..	175	50,964
Denimein	147,005	2,967	6,211	1,024	290	16,915	..	5	25	350	27,787
Jemalong—Wylde's Plains	224,556	..	7,862	9,649	952	8,652	..	..	..	252	27,367
Total, Districts	*2,756,467*	*25,468*	*116,638*	*39,818*	*9,918*	*413,659*	..	*25*	*692*	*16,955*	*623,173*
Flood Control Districts—											
Lowbidgee	399,707	..	..	..	..	..	..	..	..	..	n.a.
Medgum	272,800	..	..	..	..	..	..	..	..	..	n.a.
Total, Flood Districts	*672,507*	..	..	..	..	..	..	..	..	..	n.a.
Irrigation Trusts—											
Pomona	1,580	..	..	..	..	..	760	130	..	..	890
Bringan	4,933	..	..	..	..	..	..	..	..	..	n.a.
Bungunyah-Koraleigh	1,810	..	..	..	..	..	..	..	..	..	n.a.
Glenview	661	..	..	..	..	..	..	..	..	..	n.a.
Goodnight	1,104	..	..	..	..	..	..	..	..	..	n.a.
Bama	3,446	..	..	..	..	..	..	..	..	..	n.a.
West Cadell	5,827	..	..	..	..	..	..	..	..	..	n.a.
Total, Trusts	*19,361*	..	..	..	..	..	*(d)760*	*(d)130*	..	..	*(d)890*
Water Trusts—Domestic and stock supplies	2,829,791	..	..	..	..	..	..	..	..	..	..
Licensed diversions	n.a.	..	44,546	69,000	38,327	154,737	2,103	11,182	14,081	41,765	375,741
Total, 1967-68	**6,987,412**	**76,082**	**247,490**	**118,601**	**54,778**	**715,224**	**15,658**	**35,313**	**18,497**	**70,850**	**1,352,493**
1966–67	6,943,118	73,639	192,212	106,877	48,820	818,916	17,935	35,562	16,639	130,181	1,440,781
1965–66	6,928,808	64,341	164,059	101,901	50,417	742,249	16,361	36,065	16,593	116,453	1,308,439
1964–65	6,912,735	61,617	132,624	42,901	9,491	552,888	14,035	27,605	4,375	81,494	(e)1,198,404
1963–64	6,912,942	59,331	82,376	45,823	11,846	505,176	12,810	24,451	2,859	82,046	(e)1,060,479

(*a*) Excludes Flood Control Districts and some Irrigation Trusts, particulars for which are not available. (*b*) Citrus and deciduous; in 1967–68 deciduous amounted to 12,983 acres, of which 10,535 acres were in the Murrumbidgee Irrigation Areas. (*c*) Includes lands outside irrigation areas supplied under special agreement. (*d*) Incomplete. (*e*) Includes total area irrigated by Licensed Diversions, but details for individual crops, etc., are not available.

Irrigation Areas

Murrumbidgee. These areas, together with adjacent lands supplied under agreement, received 453,204 acre feet, or about a fifth of the total water (2,270,944 acre feet) allocated within the State for stock, domestic supply and irrigation. They are served by the Burrinjuck Dam on the Murrumbidgee, forty miles north-west of Canberra. The catchment above the dam is about 5,000 square miles. The river rises on the high plateau north of Mount Kosciusko where the average annual rainfall exceeds 60 inches. Flow for the irrigation areas and districts is supplemented by unregulated flow from the Tumut River below the dam. The dam also provides town supplies for Gundagai, Wagga, Narrandera, Hay, Balranald, and for towns served by the South-West Tablelands scheme.

Domestic and stock water and water for irrigation are supplied to the Irrigation Districts of Tabbita, Benerembah and Wah Wah, and the Flood Control and Irrigation District of Lowbidgee. Flood flows are relied on to serve the Lowbidgee district, and water is not released from the dam for that purpose. For the other undertakings, however, water is stored during the winter, fed by melting snows and spring freshets, and is released during the September–May irrigation season. It passes along the river channel to Berembed Weir, 240 miles westward, where it is diverted to the main canal with an off-take capacity of 1,600 cubic feet a second. The main canal has been completed to beyond Griffith, 106 miles from the off-take. Reticulation channels aggregate approximately 900 miles and drainage channels 880 miles. In addition, approximately 440 miles of supply channels run through irrigation districts adjacent to the Murrumbidgee Areas in which the water supply is operated and maintained by the Water Conservation and Irrigation Commission.

The Water Conservation and Irrigation Commission controls land transactions and water supplies for the Murrumbidgee Irrigation Areas only, and has no jurisdiction over land transactions in the adjacent irrigation districts, although it is responsible for the operation and maintenance of the water supply in these areas. Other local government services, including electricity and town water supply, are provided by Councils. Land is disposed of by the Commission by purchase or under perpetual lease tenure or leased for short terms for grazing or cultivation. The area under occupation at 30 June 1968 was 414,273 acres, including 36,869 acres held for short lease grazing, agriculture, etc.

The land on which the Murrumbidgee Irrigation Areas and associated districts are situated originally comprised large sheep stations and was sparsely populated, but at 30 June 1968 its population was approximately 30,500, that of Leeton Shire being 11,040 and that of Wade Shire, 18,700. The principal products of the Murrumbidgee Irrigation Areas are wool, livestock for slaughtering, rice, citrus fruits, peaches and nectarines, grapes, tomatoes, peas, beans, and root vegetables. Rice growing was initiated on the Areas in 1924 and has since become the most important crop. In a normal season the water supplied for rice represents about half the total delivered to the Areas.

Other Irrigation Areas. The Coomealla, Tullakool, Buronga, Mallee Cliffs, Hay, Curlwaa, and Coleambally Irrigation Areas follow the same administrative pattern as the Murrumbidgee Areas—that is, land transactions are administered by the Water Conservation and Irrigation Commission which is responsible also for the operation and maintenance of works to supply water.

Irrigation Districts

These districts are set up under the Water Act, 1912–1955 for (*a*) domestic and stock water supply and (*b*) irrigation. They differ from water trusts in that the cost of the works is not required to be repaid over a period, but annual charges are made by the State for water supplied to landholders.

Since the completion of the Hume Reservoir, several such districts have been established along the Murray to utilise the New South Wales share of the storage. Water is not available for the whole of the 5,000,000 acres adjacent to the Murray in New South Wales, and therefore the schemes are based on 'extensive' irrigation, that is, water rights are allotted to holdings on the basis that only a portion of each holding (one acre in three, five or ten, according to the district, etc.) will be irrigated, but additional water, when available, may be obtained by landholders. 'Water right' means right to such a quantity annually of water, 12 inches deep, as will cover an area of one acre.

Water to serve Berriquin, Deniboota and Denimein Districts is diverted through a main canal which is approximately 100 miles long. Water for the Wakool Irrigation District and the Tullakool Irrigation Area is diverted from the Edward River at Stevens Weir, and a supplementary supply is also obtainable from Mulwala canal. The total length of completed canals and channels in Berriquin District is 1,000 miles, comprising Mulwala canal 75 miles, Berrigan channel 22 miles, subsidiary channels 788 miles, escape channels 105 miles, and cross drainage channels 10 miles, Off-take capacity of the Mulwala canal is 5,000 acre feet a day. Wakool, with 422 miles of channel, contains 318 holdings, and the area developed by irrigation includes about one acre in six of the total area. Sheep raising and rice growing are the main industries. Considerable subdivision has occurred within the Berriquin District, and the proportion of the total area developed for irrigation is higher than in the case of Wakool. Sheep (including fat lambs), dairying, wheat, and rice growing are the main industries.

Water Trust Districts, Irrigation Trusts and Flood Control and Irrigation Districts

The Water Act, 1912–1966 provides for the constitution of Trust Districts for domestic and stock water and irrigation, and empowers the Commission to construct, acquire or utilise necessary works. When the works are completed, they are handed over to trustees to administer. The trustees are elected by the occupiers of the land and act with a representative of the Commission. They are empowered to levy and collect rates covering the cost of the works repayable to the Crown by instalments and also the cost of operation and maintenance of the works. The rates are struck according to the area of land which benefits. The following are the water trusts, other than irrigation, as at present constituted (the area in acres of each district being shown in parenthesis): *Murray River*—Little Merran Creek (157,440), Bullatale Creek (68,320), Poon Boon (34,300), Minnie Bend Flood Prevention (2,190); *Murrumbidgee River*—Yanco, Colombo and Billabong Creeks (1,007,780); *Lachlan River*—Marrowie Creek (292,640), Torriganny, Muggabah and Merrimajeel Creeks (170,240), Ulonga (64,960), Micabil Weir (11,500), Condobolin West Weir (4,480); *Miscellaneous*—Great Anabranch of Darling River (959,184), Nidgery Weir (46,880), Algudgerie Creek (9,760), Collarenebri town water supply (117)—making in all a total area of 2,829,791 acres. Twelve of these trusts have been formed for the provision of water for domestic and stock purposes, one for a town supply and one for flood prevention.

Irrigation Trusts are established under the same Act and are administered by trustees in a similar way. There are seven of these trusts.

The Lowbidgee Provisional Flood Control and Irrigation District, the first of its kind, was constituted in 1945. Its purpose is to provide flood irrigation for pasture lands on the lower Murrumbidgee by water diverted from the Maude and Redbank Weirs. Another district, Medgun, near Moree in the north-west, is also in operation.

River, lake and farm water supplies

During recent years the numbers of licences and permits issued to individuals to draw water from rivers and lakes for irrigation have increased substantially, especially along the coastal streams in sub-humid districts where the value of supplementary irrigation is becoming more recognised as a means of stabilising production in dry months. There has also been a considerable increase along the Murrumbidgee, Lachlan, Namoi, and Macquarie Rivers.

Under the Farm Water Supplies Act, 1946, technical advice and assistance, and also financial assistance, are made available to help individual farmers and groups of farmers to provide and improve water supplies for domestic, stock and irrigation purposes by means of wells, bores, excavated tanks, weirs or dams, and flood and spray irrigation systems.

Underground water

Extensive use is made of artesian, sub-artesian, and shallow underground water. The Great Artesian Basin underlies an area of some 81,250 square miles in north-western New South Wales. Eighty-seven Bore Water Trusts and twelve Artesian Wells Districts have been constituted. Bore Trusts are administered in the same way as Water Trusts, but in Artesian Wells Districts the settlers maintain the drains. Bore Trusts and Artesian Districts cover 5,500,000 acres and distribute water through 3,592 miles of open earth drains. At 30 June 1968, 1,167 artesian bores had been constructed in the New South Wales section of the Basin. At that date 692 bores were flowing and were capable of producing an aggregate unrestricted flow of about 64,000,000 gallons a day. Conservation measures control this to about 50,000,000 gallons a day. The total length of bore drains, including those for Trusts and Districts, is approximately 8,000 miles.

Of other structural basins of sedimentary rocks, e.g. Murray, Sydney, Oxley, and Clarence Basins, the Murray is the largest and also the most important in that it affords stock water supplies over an extensive area of the south-western section of the State. Only a few of these bores flow, the remainder being sub-artesian. Good supplies for stock and, in some instances, small scale irrigation, are obtained from porous sandstone in the Moss Vale-Picton area, but the remainder has limited potential. Stock supplies are obtained from bores in the fringe zones of the Oxley Basin, but the centre of this basin lies under the Liverpool range. The Clarence Basin is relatively unimportant from a groundwater viewpoint, but stock supplies are obtained from some sections.

In other parts of the State the largest and best quality groundwater supplies are obtained from sands and gravels in the alluvium of the major rivers and their tributaries, particularly the western-flowing rivers, e.g. Lachlan, Macquarie and Namoi. Supplies ranging from 10,000 to 210,000 gallons an hour are obtained from wells and bores in these areas and are used for irrigation and town water supply. The Government is carrying out investigations to determine the ground-water potential of the alluvium of such valleys, particularly with regard to irrigation use, and test-boring programmes are in progress in the Lachlan, Namoi, Murrumbidgee and Macquarie Valleys. Investigation programmes have also been initiated in the coastal river systems, commencing with the Hastings and Bega river valleys, but the groundwater potential of the coastal valleys is quite limited compared with the inland drainage systems. Old sand dune areas along the coast provide large supplies of good quality water. However, since the soils of these areas are not suited to agricultural pursuits, exploitation has been largely confined to the Sydney and Newcastle areas. Initially a source of Sydney's water supply, the Botany sands are now utilised mainly by industry. The Tomago sands provide a considerable proportion of the Newcastle water supply.

The older rocks, which are mostly folded and jointed, are very variable in their groundwater potential and only rarely do they yield supplies sufficient and suitable for limited irrigation. Where suitable conditions obtain, they yield useful stock supplies, mostly at depths between 50 and 250 feet.

A licence under the Water Act, 1912–1966 is required for all bores sunk in any part of New South Wales, and details of over 30,000 bores and wells in the State are recorded. When assessed in relation to the geologic and topographic conditions of any particular area, such records provide valuable evidence of the groundwater potential and are thus of considerable benefit to landholders.

Future programme

The programme of development in hand includes the provision of additional dams and storages, weirs, and flood mitigation and river protection works in various parts of the State. Work has commenced at Copeton Dam site on the Gwydir River and continued at Pindari Dam on the Severn River. Legislation has been passed authorising the construction of Carcoar Dam (Belubula River), Lastock Dam (Paterson River), and Toonumbar Dam (Iron Pot Creek—a tributary of the Richmond River) as single purpose water conservation projects and existing legislation authorises the construction of a flood control and irrigation dam at Warkworth in the Hunter Valley. The Hunter River development, of which Glenbawn Dam is an integral part, concerns an exceptionally fertile coastal valley, forming the hinterland to Newcastle, where the annual rainfall is not heavy and variations from month to month are considerable. This is the first coastal scheme initiated in New South Wales. At Wyangala Dam, on the Lachlan River, the strengthening and enlargement of the original dam is nearing completion. The new storage capacity of 560,000 acre feet will be increased to 1,000,000 acre feet by 1970 following the installation of radial gates in the new spillway. Construction of the Blowering Dam on the Tumut River was completed in 1968. Within the new Coleambally Irrigation Area further development of farms has been carried out and water is being supplied by the new diversion weir at Gogeldrie. At 30 June 1968, 194 large area farms and 15 horticultural farms had been allotted whilst another 21 mixed farms were occupied under agreement with the Commission pending the granting of permanent title.

Victoria

Particulars of the rainfall pattern of Victoria were given on page 1117 of Year Book No. 37. (*See also* the chapter Physical Geography and Climate of this issue.)

Administration

Victorian Governments have been active in the development of country water supplies since the 1860's when major works to supply the Bendigo goldfields were undertaken. Local trusts to construct and operate waterworks under Government supervision were provided for in the *Water Conservation Act* 1881. Development under the trust system was greatly stimulated by the *Irrigation Act* 1886, which provided for the construction of national headworks by the State, and vested in the Crown the right to the use and control of all surface waters. By 1900 there were 33 irrigation trusts and 18 other rural water supply trusts, but the system of local control was then breaking down under financial difficulties.

The *Water Act* 1905 established the State Rivers and Water Supply Commission to take over the Irrigation Trust districts (except the still-existing First Mildura Irrigation Trust) and to exercise the State's functions in the further control and development of surface waters outside the metropolis. The Commission now supervises all private diversions from streams and directly administers irrigation districts covering 2,261,000 acres, rural waterworks and urban districts covering 12,077,000 acres, flood protection districts covering 149,000 acres, and urban water supplies serving 225,000 people. It also supervises the activities of local urban water supply authorities supplying 653,000 people in 252 towns, as well as 91 local sewerage authorities and 29 river improvement and drainage authorities.

Works summarised

Since the State Rivers and Water Supply Commission began its operations in 1906 the capacity of storages under its control has been increased from 172,000 acre feet to 4,679,620 acre feet. In addition, Victoria has in effect a half share in River Murray Commission storages totalling 2,703,150 acre feet, bringing total capacity available to Victoria at 30 June 1968, to 6,031,190 acre feet. Most of the water used from these storages is for irrigation. The area irrigated in 1967–68 totalled 1,301,305 acres (compared with 105,000 acres in 1906). Irrigation deliveries in 1967–68 totalled 1,984,970 acre feet. The value of irrigation production in 1966–67 was estimated at $179,000,000. Of the total irrigation production about one-quarter was from lands irrigated by 'private diverters', i.e. irrigators who are authorised to take water from streams, lakes, etc., but who do not come within the boundaries of an irrigation district.

Storages

Capacities of principal storages (in acre feet) and system totals at 30 June 1968 were as follows:

Goulburn System—Eildon, 2,750,000; Waranga, 333,400; total, 3,130,650;
Murray System—half share of Murray storages, 1,351,570; total, 1,392,430;
Ovens System—Lake Buffalo, 19,500; total, 19,500;
Loddon System—Cairn Curran, 120,600; Tullaroop, 60,000; Kerang Lakes, 57,700; total, 276,250;
Campaspe–Coliban System—Eppalock, 252,860; Coliban storages, 63,830; total, 316,690;
Wimmera–Mallee Systems—Rocklands, 272,000; Toolondo, 86,000; Bellfield, 63,680; total, 627,890;
Maffra–Sale System—Glenmaggie, 154,300; total, 154,340;
Werribee–Bacchus Marsh—total, 34,900;
Mornington Peninsula—total, 38,340.

Nature of irrigated culture

The following table shows the areas irrigated in the various irrigation systems in 1967–68, and corresponding particulars for the State as a whole during the seasons 1963–64 to 1967–68.

AREA OF LAND IRRIGATED: VICTORIA, 1963-64 TO 1967-68
(*Source:* State Rivers and Water Supply Commission)
(Acres)

		Fodder crops		*Pastures*							
					Sown						
Season and system	*Cereals*	*Lucerne*	*Other*	*Native*	*Annual*	*Perennial*	*Vine-yards*	*Orchards*	*Market gardens*	*Fallow and miscellaneous*	*Total*
1967–68—											
Goulburn-Campaspe-Loddon . .	24,985	26,504	6,733	19,241	260,065	202,798	368	24,691	3,267	15,112	583,764
Murray—											
Torrumbarry .	6,536	5,968	5,095	20,590	131,764	82,009	4,896	1,489	703	2,934	261,984
Murray Valley Irrigation Area .	1,950	6,840	1,262	545	63,004	42,037	59	6,727	280	415	123,119
Pumping(*a*) . .	110	904	245	382	184	203	39,520	3,159	215	1,385	46,307
Total, Murray .	*8,596*	*13,712*	*6,602*	*21,517*	*194,952*	*124,249*	*44,475*	*11,375*	*1,198*	*4,734*	*431,410*
Other northern systems . . .	46	1,190	..	1,865	848	8,819	..	2,660	443	..	15,871
Southern systems .	55	1,291	346	2,815	1,408	65,351	..	722	5,206	636	77,830
Private diversions(*b*) .	3,582	13,955	2,380	4,238	16,149	111,928	2,691	7,168	24,055	6,284	192,430
Total, 1967-68 .	**37,264**	**56,652**	**16,061**	**49,676**	**473,422**	**513,145**	**47,534**	**46,616**	**34,169**	**26,766**	**1,301,305**
1966–67 . . .	24,605	49,868	18,474	54,713	480,454	529,549	47,418	46,594	26,617	35,596	1,313,888
1965–66 . . .	29,347	48,016	19.123	54,967	472,426	494,040	45.697	44,851	27,653	26.541	1,262,661
1964–65 . . .	8,048	42,320	14,116	51,210	443,227	484,634	47,778	44,743	26,884	26,095	1,189,055
1963–64 . . .	14,878	42,878	21,031	41,360	427,160	453,986	45,257	43,891	24,422	22,378	1,137,241

(*a*) Includes First Mildura Irrigation Trust. (*b*) Excludes private diverters in the Torrumbarry System, but includes all other private diverters along the Murray River.

Irrigation systems

Goulburn–Campaspe–Loddon. The principal storage for Goulburn waters is Lake Eildon, which was completed in 1956, submerging the original 306,000 acre feet Eildon storage completed in 1927. For the distribution of additional supplies available from Eildon and from other new storages on the Loddon and Campaspe rivers it has been necessary to undertake major enlargements in the distribution system by a long-term programme of channel works which is still in progress. Deliveries during 1967–68 amounted to 841,000 acre feet, compared with 395,000 acre feet in 1954–55. Goulburn River water is diverted to the irrigation areas by gravitation from the pool formed by the Goulburn Weir, near Nagambie, completed in 1890 as a State work. The East Goulburn main channel of 1,000 cusecs capacity supplies the areas around Shepparton. Two 1,500 cusec channels to the west convey water to the off-river Waranga Reservoir and supply part of the Rodney area through off-takes on the way. From Waranga Reservoir there are two main outlets, one supplying the western part of the Rodney area and the other, of 1,200 cusecs capacity, supplying the Waranga Western Main Channel, which runs 230 channel miles west across the Campaspe and Loddon Valleys to beyond Birchip.

Flows in the Waranga Western Main Channel are augmented by the injection of Campaspe water through a pumping station of 200 cusecs capacity near Rochester. Supply to the Tragowel and Boort areas is augmented by gravitational diversion of Loddon water.

The gross area of holdings in the Goulburn–Campaspe–Loddon systems is 1,353,721 acres. The main products are dairy produce, fruit, wool, and fat lambs. Annual production of deciduous canning fruits in the eastern part of the system is about two-thirds of Australia's total.

Murray River system. Water is diverted from the Murray by gravity at the Yarrawonga Weir for the Murray Valley Irrigation Area and at the Torrumbarry Weir for the Torrumbarry irrigation system which extends to Swan Hill. Holdings in the Murray Valley area total 301,653 acres, devoted mainly to dairying, fat lambs and canning fruit. Holdings in the Torrumbarry system total 377,815 acres, devoted mainly to dairying and the production of fat lambs, with a concentration of vineyards, orchards and market gardens around Swan Hill.

Downstream from Swan Hill there are 5 districts supplied by pumping: the district of the First Mildura Irrigation Trust and the 4 Commission districts of Nyah, Robinvale, Red Cliffs, and Merbein. These districts together serve 80,585 acres, producing mainly dried vine fruits, with some citrus fruits and table and wine grapes.

Southern systems. The Macalister district, covering 130,506 acres around Maffra and Sale, is supplied from the Macalister River, regulated by Lake Glenmaggie, and from the unregulated flow of the Thomson River. Dairy farming is the principal activity. The Bacchus Marsh and Werribee Districts, supplied from storages in the Werribee River only 20 miles west of Melbourne, cover 16,342 acres intensively developed for dairying and vegetables.

Wimmera-Mallee domestic and stock supply system

Storages in the Grampians in south-west Victoria ensure farm water supplies over an area of 11,000 square miles extending northward through riverless pastoral and cereal lands to the Murray. Farm dams throughout this region, which covers one-eighth of the total area of the State, are filled once each year, in the winter-spring season, through the medium of 6,600 miles of Commission channels and about 4,000 miles of private channels. Without this supply, occupation of the region would be extremely hazardous. Storage capacity has now been increased from 564,210 acre feet to 627,890 acre feet by construction of Lake Bellfield. Fifty towns, with a population of 46,000, receive their supply from the same system. Near Horsham and Murtoa, close to headworks in the south, a supply is maintained for the irrigation of an area of 7,500 acres, mainly for dairying.

Drainage, flood protection and river improvement

The largest work in this category undertaken by the State Rivers and Water Supply Commission is the Koo-wee-rup–Cardinia flood protection district embracing 89,245 acres of a continuous depression along the seaboard of Westernport. Once useless, indeed a hindrance to communication, this area now yields primary products worth several million dollars each year.

By the *River Improvement Act* 1948, the formation of local river improvement and drainage trusts under the supervision of the Commission has been greatly facilitated and since 1950, 29 such trusts have been formed (including the Dandenong Valley Authority). The importance of river improvement work is expected to continue to grow.

The Dandenong Valley Authority was created in 1963 by special legislation, with jurisdiction over the whole catchment of the Dandenong Creek (300 square miles) for purposes of arterial drainage, river improvement and flood protection. In June 1966 the Authority took over the Commission's Carrum Drainage District.

Finance

The net capital liability of the Commission at 30 June 1968 for works under its direct control was $291 million. Of this amount, $189 million was expended for irrigation and $25 million for rural, domestic and stock supplies, the cost being borne entirely by the State. The total liability for urban supplies was $55 million, of which $30 million was borne by the districts concerned. The remaining $22 million was for expenditure on flood protection ($2 million), and items such as loan flotation expenses, miscellaneous surveys and investigations, and buildings, plant and stores.

Underground resources

The investigation, exploration and survey of underground water resources in Victoria is carried out jointly by the State Rivers and Water Supply Commission and the Department of Mines. The Commission is concerned mainly with investigation of shallow waters in irrigation districts, while the Department covers all other work, including exploratory drilling to 5,500 feet. Underground water is the only available source of supply other than rain in some areas of the State. It is of particular importance in the western portions of the Wimmera-Mallee districts where annual rainfall ranges between 10 and 20 inches and there are no surface streams. Elsewhere underground water is used to supplement surface supplies and in places it may be the only developed source for town, industry, rural, domestic, stock, or irrigation use.

The Wimmera and Mallee districts are situated over part of the Murray Basin where, to the west of the Wimmera River, Miocene marine limestones form an aquifer with water suitable for town supply and irrigation. It is used for this purpose at Kaniva, Murrayville and Nhill, where yields between 10,000 and 60,000 gallons per hour may be obtained. On an experimental farm at one of these localities, total pumpage during each irrigation season is of the order of 1,500–2,000 acre feet. North of Murrayville and Underbool the water in the limestones is more saline and in the extreme north it is too saline even for stock use. East of the Wimmera River to Lake Tyrrell and north of Swan Hill the marine rocks consist of marls and silts with calcareous beds capable of yielding saline water at less than 1,000 gallons per hour. These acquifers are not developed. Lower Tertiary swamp, deltaic and estuarine carbonaceous and ligneous sediments underlie and extend eastward of the marine rocks. Sands in these sediments contain water of greater or lesser salinity than that of the marine deposits. Yields of up to 10,000 gallons per hour have been obtained from the deltaic aquifers between Swan Hill and Robinvale. In the Natya-Kenley area the water is suitable for most stock purposes and for limited irrigation under favourable conditions. Overlying the marine and estuarine sediments there are aquifers consisting of Pliocene to Pleistocene terrestrial, fluviatile and lacustrine sands and sandstones. Yields from these rocks are limited to windmill supplies. The quality is variable and in the north-west highly saline. East of the Avoca River the deposits of the Murray Basin are entirely non-marine and consist of terrestrial, fluviatile and lacustrine gravels, sands, silts, and clays to a maximum depth of about 600 feet. Water from the sands and gravels is of variable quality. In places it is too saline for stock use, but the quality improves towards the east and it is used for town supply at Katunga and Wangaratta, and at Barnawartha, Bright and Chiltern where the deposits partly fill valleys in the bedrock of the highlands.

In the Otway Basin in the south-west of Victoria the Upper Cretaceous-Lower Tertiary sands have been developed for underground water supplies to Portland, Heywood, Port Fairy, Peterborough, Port Campbell, and Timboon. In the central (Warrnambool and Koroit) and northern parts of the basin the waters are suitable only for stock. In the areas of better quality water the depth of the aquifers (2,000–4,500 feet) renders their development uneconomic except for town supply and industry although there was one case, during 1968, of development of aquifers down to 1,950 feet for small farm use. Oligocene to Miocene marine limestones occur in the south-central and western portions of the basin. The salinity of the water in the limestones is often less than that of the water in the sands beneath, but the limestone waters are generally hard. They are used in part to supply Portland and also for irrigation. Small underground water supplies are obtained from the Pliocene-Pleistocene deposits of ferruginous sands, marine sandy limestones and dune limestones in the west and from the dune limestones along the coast between Warrnambool and Portland.

In and around the structural depressions of the Port Phillip and Westernport Bay districts there are several small areas where underground water of good quality occurs. Among these are the Lower Tertiary sand aquifers at Anglesea which are being developed to yield approximately 200,000 gallons per hour for industrial purposes; the Middle Miocene sands, shelly silts and limestones which have been developed for market garden watering south-east of Melbourne; and the Pleistocene sands and shelly silts on the Nepean Peninsula where the water is used for market gardens and pasture irrigation.

Brackish waters in the Eocene to Oligocene sands under the Werribee Plains have some potential for industrial use. The Westernport area has yielded large supplies of water from Tertiary marine and non-marine sands, and from fractured fresh basalt in some areas. Extensive use is made of water from the sands for irrigation of pastures and cash crops in the Koo-wee-rup Swamp area. Yields of up to 30,000 gallons per hour are common. In the Lang Lang area the water is used for town and industrial supply, but not as yet for irrigation. Stock supplies with one or two minor exceptions are available at shallow depth over the whole of the area.

The Gippsland Basin contains two main groups of water-bearing rocks, the Lower Tertiary coal measures and marine sands, and the Upper Tertiary sands and gravels. Water from the Lower Tertiary rocks is frequently soft. It is used for irrigation in the Bairnsdale and Yarram districts, and some abnormally hot water is used for industrial purposes at Maryvale. The Upper Tertiary rocks yield large quantities of very good quality water, mainly in the east-central part of the basin where it is used extensively for irrigation. Development of these aquifers for irrigation supplies also took place in the Yarram district during 1968. Stock supplies are generally available at shallow depth in rocks of various types and ages.

The pre-Upper Cretaceous sedimentary and igneous rocks of the highland areas generally yield small supplies of water suitable for stock. Exceptions to this are the Devonian sandstones of the Grampians where large supplies of good quality water may be obtained, and the better quality waters suitable for domestic use from the higher rainfall area of the eastern highlands of the State.

The Lower Tertiary volcanic rocks, mainly basalts, yield large supplies, up to 15,000 gallons per hour where the basalt is well jointed and little weathered, but only small quantities where the rocks are weathered. Where yields are large as in the west and south-west of Gippsland and on French Island the water quality generally is suitable for irrigation, but on the Bellarine and Mornington

Peninsulas, Phillip Island and at Cranbourne the small yields of water are suitable for limited stock use only. Pliocene to Pleistocene volcanic rocks, basalts with tuffs and agglomerate occur extensively over the Werribee Plains and Western District and in valleys in the western half of the Central Highlands. Yields from these rocks are variable, the maximum recorded being 16,000 gallons per hour. From the weathered basalt yields are usually less than 1,000 gallons per hour. The quality is generally suitable only for stock but may be suitable for irrigation. Underground water derived from the later basalts of the stony rises west of Colac usually has high nitrate content.

Future programme

In July 1963 the Government announced plans for a long-term storage programme for irrigation purposes to cost a total of $75 million between 1963–64 and 1973–74. This included the projected Chowilla Reservoir referred to on page 933. Another of the storages is Lake Buffalo (second stage) which appears in the list of dams and reservoirs projected in the table on page 929.

Since the long-term storage programme came into operation, new storages have been completed for the Wimmera–Mallee System (Lake Bellfield, near Horsham); the Mornington Peninsula System (Devilbend Reservoir and Tarago Reservoir); the Goulburn-Murray System (Corop Lakes) and private diverters near Benalla (Lake Nillahcootie); and along the Buffalo River (Lake Buffalo, first stage).

At present work is proceeding on new storages to supplement supply to the Bacchus Marsh–Werribee System (Lake Merrimu) and the Goulburn–Murray System (Lake Mokoan, near Benalla).

Works expenditure of about $4,000,000 per year is carried out from about thirty-five operating centres throughout the State. In addition, four major construction centres have been spending about $2,500,000 annually for many years on a programme of channel and drainage works in the Goulburn–Murray System, and the end of this programme is not yet in sight.

A major new development has been a grant of $3,600,000 from the Commonwealth Government to finance a scheme to reduce the flow of saline drainage water into the River Murray.

Details of a projected storage on the Mitta-Mitta River at Dartmouth in North-Eastern Victoria appear on page 933.

Queensland

Particulars of the rainfall pattern of Queensland are given in Year Book No. 37, page 1122. (*See also* the chapter Physical Geography and Climate of this issue.)

Administration

In Queensland the right to the use and flow of non-tidal surface water contained in, or flowing through or past, the land of two or more occupiers, and all artesian and sub-artesian water vests in the Crown. Subject to certain reservations for local authority and other purposes, such water is controlled by a Commissioner of Irrigation and Water Supply. Private diversions from watercourses, artesian wells and, in certain declared areas, sub-artesian wells, are subject to licence by the Commissioner. Dams and weirs are constructed by the Commissioner to safeguard supplies in streams from which private pumping for irrigation takes place, and also to provide water for irrigation areas established by the Commissioner. For a description of the development of the present administration *see* Year Book No. 42 and earlier issues.

Irrigation—extent, systems and methods

Queensland sugar cane represents in value about 40 per cent of the agricultural production of the State. In 1967–68, 22 per cent of the sugar cane acreage was irrigated, representing 40 per cent of the total area irrigated in the State. Tobacco is another major crop, and the area irrigated during 1967–68 represented 97 per cent of the total plantings. Irrigation of grain crops has increased considerably in recent years and this trend is expected to continue.

Most irrigation in Queensland is undertaken by farmers operating under licence to obtain water by pumping from streams or from natural underground storages. Over half the total area irrigated in Queensland is supplied from underground water. The main areas where these supplies have been developed extensively are the Burdekin Delta (Ayr-Home Hill area), the Pioneer Valley, Callide Valley, Lower Burnett (Bundaberg area), Lockyer Valley, and Redland Bay.

Furrow irrigation is used for cotton, sugar cane, some tobacco, and miscellaneous row crops. Spray irrigation is used widely on fruit, vegetables, fodder crops, sugar cane, and the major part of the tobacco crop. Irrigation is required around-the-year for most of Queensland, as the timing and duration of the summer 'wet' season are too variable to enable a definite non-irrigation season to be fixed, as can be done in southern States.

AREA OF LAND IRRIGATED: QUEENSLAND, 1963-64 TO 1967-68

Season and division	*No. of irrigators*	*Area irrigated (acres)*							
		Vegetables	*Fruit and vineyards*	*Sugar cane*	*Tobacco*	*Cotton*	*Other crops*	*Pastures*	*Total*
1967–68—									
Southern Queensland .	6,559	33,154	7,742	44,931	2,395	5,540	77,722	32,803	204,287
Central Queensland .	699	1,071	698	213	46	2,935	17,033	3,743	25,739
Northern Queensland .	2,333	6,351	1,098	95,943	9,392	27	5,016	4,608	122,433
Total, 1967-68 .	**9,591**	**40,576**	**9,537**	**141,087**	**11,833**	**8,502**	**99,771**	**41,154**	**352,459**
1966–67 . . .	9,604	39,198	9,040	142,620	11,781	7,997	88,508	44,908	344,052
1965–66 . . .	9,897	38,726	9,049	140,994	12,116	6,333	90,070	35,246	332,534
1964–65 . . .	9,310	35,020	8,092	120,556	13,499	4,148	71,634	28,224	281,173
1963–64 . . .	8,930	36,329	7,315	98,204	15,079	2,717	65,078	27,360	252,082

Areas under private irrigation

In five important areas irrigation has been developed by private pumping. In the Lockyer Valley, thirty miles west of Brisbane, more than a third of an estimated total irrigable area of 60,000 acres is under irrigation. The valley comprises an extensive flood plain where heavy black alluvial soil thickly overlies gravels and sands carrying water suitable for irrigation, which is necessary for continuous agricultural production. A number of small weirs with a total storage of 1,340 acre feet have been constructed on Lockyer Creek by the Irrigation and Water Supply Commission; these also tend to augment and conserve underground supplies. Construction has recently commenced on an off-stream storage in the Atkinson's Lagoon area which will be supplied by diversion from Buaraba Creek and several adjoining catchments. The storage will provide a regulated supply of water in Buaraba Creek and along the lower end of Lockyer Creek. The Lockyer Valley produces a substantial proportion of Queensland's onions, potatoes, pumpkins, lucerne, hay, green fodder, maize, and dairy products.

The Callide Valley in central Queensland is an important source of grain, dairy products, fodder, and cotton and is largely dependent on irrigation from underground water resources. Some 10,000 acres are now irrigated from underground supplies. The broad expanses of alluvium in the Pioneer Valley near Mackay have been extensively developed for cane production. The area under irrigation from groundwater and surface supplies is some 12,000 acres. The lands in the vicinity of Bundaberg are cultivated for sugar cane production and over 40,000 acres are irrigated from surface and underground supplies.

The other important area is the fertile delta region of the Burdekin River, where the irrigated area is over 67,000 acres. The delta has ground water supplies at shallow depth, and these have been tapped to obtain supplies in the dry periods of the year. Sugar is the main crop irrigated. A scheme to replenish the subterranean water supplies in the North Burdekin Delta by pumping from the Burdekin River is in operation under the control of the North Burdekin Water Board. There is a similar Board in operation in the South Burdekin Delta.

Government irrigation areas and projects

The Irrigation and Water Supply Commission has constructed and operates five dams and forty-five weirs with a storage capacity of 572,271 acre feet. Water from these storages supplies the following four irrigation areas operated by the Commission and supplements numerous streams from which pumping for private irrigation takes place.

Mareeba-Dimbulah Irrigation Area. In 1952 an irrigation undertaking was established to assist tobacco production in the valleys of the Walsh and Barron Rivers. Tinaroo Falls Dam on the Barron River (330,000 acre feet) has been completed, and construction is in hand on irrigation works to serve 78,000 acres (comprising 910 tobacco farms and 180 mixed farms), of which 49,000 acres will be irrigated. Two hundred and four miles of channels have been constructed, and irrigation water from the dam is being supplied to 546 farms. Tinaroo Falls Dam is also providing a regulated flow of water in Barron River at Kuranda for the generation of hydro-electric power at Barron Falls.

Burdekin River Irrigation Area. The first stage of the Burdekin River Irrigation Area, comprising the Clare–Millaroo and Dalbeg sections, has been completed. Located from twenty-five to sixty-five miles from the mouth of the Burdekin, these areas comprise 18,862 acres and obtain water from central pumping stations drawing from the river. Two storages of 7,670 acre feet and 2,550 acre feet capacity have been constructed about seventy-nine miles and seventy-two miles respectively from the mouth of the river. Sugar cane production predominates in the area but rice production is expected to increase in the next few years following recent highly successful trials. Additional water for the region will become available following completion of the Eungella Dam on the Broken River.

Dawson Valley Irrigation Area. A scheme for the development of the Dawson Valley providing for the irrigation of 70,000 acres was inaugurated in 1923, but work was discontinued after three weirs had been built in this area. Their total storage is 10,280 acre feet, covering about sixty-one farms (4,894 acres) in production. Cotton and grain account for the major part of the production from irrigated areas. Further development of the scheme is dependent on the provision of additional storage works.

St George Irrigation Area. This area comprises twenty farms, on which some 7,100 acres were irrigated during 1967–68 from a weir on the Balonne River (8,200 acre feet). Cotton, grain, fodder, wool and fat lambs are the main products. Construction has commenced on additional storage and the provision of irrigation and other works to serve a further thirty-two farms. The major storage, to be built on the Balonne River (Kajarabie Dam), will have a capacity of 81,000 acre feet.

Emerald Irrigation Area. Formal approval for the establishment of the Emerald Irrigation Area was given on 28 March 1968, following agreement by the Commonwealth Government to make a non-reimbursable grant of up to $20,000,000 available for the construction of the dam. The project involves the construction of Fairbairn Dam on the Nogoa River with a capacity of 1,170,000 acre feet and the construction of irrigation, drainage, road and other works to serve some 130 irrigation farms on which up to 49,000 acres could be irrigated annually. Construction of Fairbairn Dam has commenced and is expected to be completed by 1972.

Several additional projects have recently been completed and work is in progress on others. Moogerah Dam (Warrill Valley Project) on Reynolds Creek (75,000 acre feet) is capable of irrigating some 7,000 acres of the Warrill Valley, and is providing water for the thermal power station at Swanbank, near Ipswich. Borumba Dam (Mary Valley Project) on Yabba Creek (34,500 acre feet) makes water available to maintain the town water supply for Gympie and will allow extension of the area irrigated from the Mary River to about 18,000 acres. Callide Dam (37,800 acre feet) on Callide Creek, nine miles upstream from Biloela, will provide cooling water for the Calcap power station and compensation water for maintenance of underground supplies along Callide Creek. Leslie Dam (Upper Condamine Project), on Sandy Creek, has an initial capacity of 38,200 acre feet, with provision for later increase to 87,000 acre feet. Water from the dam is available for irrigation along the Condamine River as far as Cecil Plains and for a supply to the city of Warwick. Coolmunda Dam (Macintyre Brook Project) nearing completion, with a capacity of 61,000 acre feet, will provide irrigation water for up to 8,000 acres along Macintyre Brook. Wuruma Dam (Upper Burnett Project), under construction on the Nogoa River, will have a storage capacity of 157,000 acre feet for irrigation of 11,000 acres along 100 miles of the Burnett River. Eungella Dam (Bowen-Broken Project), nearing completion on the Broken River, will have a storage capacity of 106,000 acre feet and will provide cooling water for the Collinsville power station, water for Collinsville town and irrigation water along the Bowen and Lower Burdekin rivers. As indicated on page 945, work is also in hand on the Atkinson's Lagoon Storage (capacity 25,400 acre feet), to provide irrigation water in the Lower Lockyer Valley. Bedford Weir (storage capacity 5,500 acre feet), situated on the Mackenzie River some 15 miles north of Blackwater is under construction and will provide an assured supply of water for mineral development and urban requirement in the Blackwater area and some irrigation along the Mackenzie River. The development of rivers constituting portion of the Queensland-New South Wales border, under the authority of the Dumaresq-Barwon Border Rivers Commission, is described on page 934.

Rural Water Supply Areas

Although provisions existed in the Water Acts for many years for the constitution of rural water supply Areas and Boards, little advantage was taken of these powers until 1964 when an amendment of the Acts extended the purposes for which these Areas and Boards may be constituted and the methods of rating and financing of works, and provided for resumption or acquisition of lands by such Boards. This form of water supply is being sought increasingly by groups of landholders in various parts of Queensland to provide a reasonably economical measure of permanent supply for stockwatering, dairy and domestic purposes in areas prone to drought, and thus achieve a permanent form of drought relief. Usually the capital cost of works is met by a 50 per cent subsidy by the Government and the balance by a Board borrowing by Government guaranteed loan on the security of debentures.

At present nine Rural Water Supply Areas, Grevillea, Back Creek, Brigooda, Tarampa, Coreen, Roadvale, Proston, Merlwood and Kooingal are operating, supplying 413 rural holdings, covering 192,250 acres and reticulated by 227 miles of pipelines. Other schemes are in course of construction at Woodmillar, Glamorgan Vale and Benleith; these will supply a further 89 rural holdings by 67 miles of pipelines and serve 51,000 acres.

Water conservation, irrigation and drainage schemes may also be carried out under these Acts, and two group irrigation proposals and ten group drainage proposals are currently under investigation. A 20 per cent subsidy has been applied to the drainage proposals.

Underground water—Great Artesian Basin and other sources

The use of underground water supplies has been a very important factor in agricultural and pastoral development in Queensland. The Great Artesian Basin is the major source of stock water supplies over more than half the State. Elsewhere, supplies obtained at shallower depths, in porous, fractured or fissured rocks, are extensively used for domestic and stock purposes. Underground water also supports more than half the irrigated area in the State, supplies being obtained chiefly from alluvial formations along river valleys, and from river deltas, the most conspicuous example of which is the Burdekin River (*see* page 945).

Great Artesian Basin

Western Queensland, beyond the 20-inch rainfall belt, is predominantly pastoral and is mainly dependent for water supplies on artesian and sub-artesian bores and, where surface storage is not readily available, on excavated tanks. The Great Artesian Basin in Queensland corresponds approximately with the area lying west and south of the Great Dividing Range, excluding the Cloncurry mineral field and the Barkly Tableland. It comprises 421,000 square miles or nearly two-thirds of the total State area of 667,000 square miles.

Artesian water. Although the number of bores has gradually increased over the years, the total flow of all bores has declined from the peak flow of 351 million gallons a day. A report on the nature and structure of the Great Artesian Basin, presented in 1954, indicated that the output would continue its decline during the next sixty years, at which stage the flow from the remaining flowing bores would be of the order of 110 million gallons a day. The discharge from windmills, springs and other leakages, together with the underflow past the Queensland borders, would then be about 20 million gallons a day. It was further expected that the total discharge, of the order of 130 million gallons a day, would be in equilibrium with the recharge of the basin. It was expected that numbers of bores on higher ground would cease to flow during the next sixty years and the area served by the flowing bores would contract by perhaps twenty per cent.

Up to 30 June 1968, 3,060 artesian bores had been drilled, of which 2,022 were still flowing. The total depth drilled amounted to 4,273,763 feet and the estimated daily flow was 192 million gallons. Although very few bores exceed 2,000 feet in depth (the average depth is 1,400 feet) and a new bore greater than 4,000 feet deep is exceptional, the deepest bore recorded was sunk to 7,009 feet. Some bores which had been classified as 'ceased' have been inspected and found to be still flowing, while other ceased bores have responded to deepening and have recommenced flowing. Both the pressure and flow of artesian bores are steadily diminishing, the rate of decrease varying widely throughout the basin. Present average rates of diminution are: pressure, 1–2 feet of head; total flow, 2–3 per cent per annum. The greater part of the artesian discharge is distributed by some 15,500 miles of open earth channels, from which a large proportion of water is lost by soakage and evaporation, less than 10 per cent being actually used by stock.

Although artesian beds underlie a large area of the State, only 79,000 square miles are primarily watered by bore drains. The remaining area is watered by artesian bores (with small or no flow and limited drains), sub-artesian bores, excavated tanks, dams, and natural waterholes. At the present time an increasing use is being made of pipelines for the reticulation of artesian water. In many districts artesian bores do not provide economical watering facilities because of depth, limited area to be watered, and difficult terrain for distribution of water by drains. The quality of artesian water from the greater part of the basin is not suited for prolonged use for irrigation on most soils, nor are the supplies sufficient for both large scale irrigation and stock-watering. Practically the whole of the final steady-rate discharge from flowing bores will be needed for the watering of stock.

Shallower supplies, which come from beds unconnected with artesian beds, are of variable quality and volume. These supplies are available at depths of less than 1,000 feet over a large area of the basin. A total of 12,358 sub-artesian bores within the Great Artesian Basin have been registered in Queensland. An important practical consideration is that the main artesian beds are continuous and the sub-artesian beds are not continuous.

Bore Water Areas. The constitution of Bore Water Areas was inaugurated in 1913 to aid pastoral settlement in districts where large flows were available at a cost beyond individual capacity, and to conserve artesian supplies by fully utilising flows from the existing bores on the land resumed for closer settlement. Bores and drains are constructed from loan funds repayable over a period of years. The areas are administered by local boards or by the Commissioner of Irrigation and Water Supply, acting as a board. Rates are levied to meet interest, redemption, maintenance and administration costs. Statistics for the year 1967–68 are: areas constituted, 74; administered by the Commissioner, 55; administered by local boards, 6; number abolished, 13; area benefited, 4,800,156 acres; average rate per acre, 1.1 cents; number of flowing bores, 59; total flow, 24,755,000 gallons a day; drains served, 2,529 miles.

Other underground sources

Outside the Great Artesian Basin, ground water supplies can conveniently be divided into two broad groupings, (*a*) those obtained in porous, weathered, fissured, or fractured rocks, and (*b*) those obtained in unconsolidated sediments of Cainozoic age. In the first group, supplies, often within short distances, are widely variable both in quantity and quality, but are normally sufficient only for stock-watering purposes. Because storage is generally small, seasonal fluctuation of water level tends to be high, and this can have a significant effect on the supply available during dry seasons. Small to moderate irrigation supplies (up to a few thousand gallons an hour) are sometimes obtained, and, in exceptional cases, particularly with basalts and limestones, supplies may be as much as 10,000 gallons an hour. The second group comprises the main irrigation supplies, and, although a wide range may be found in the supply normally available from individual bores in any area, pumping rates as high as 10,000 gallons an hour are common. The availability of underground water has been investigated in a considerable number of alluvial valleys in south-eastern Queensland and in a number of coastal areas, particularly in the vicinity of the estuaries of the Burnett, Pioneer, Haughton, and Burdekin Rivers, where underground water is the main source for irrigation of sugar cane.

Reference has already been made to the importance of underground water for irrigation in the Lockyer and Callide Valleys (*see* page 945). Other areas in which irrigation supplies from alluvial formations have been extensively utilised include the Monto area, parts of Barker and Barambah Creeks, Warrill Creek, Cressbrook Creek, the Upper Logan River, Don River (Bowen), Bremer River, and parts of the Condamine River and its tributaries. Government authorities do not normally undertake private drilling for landholders, but assistance is given in the location and development of ground water supplies through the provisions of '*The Farm Water Supplies Assistance Acts*, 1958 *to* 1965' (*see* below). This assistance has considerably accelerated the use of underground water for irrigation, and there is no doubt that there are many areas with a large potential for future expansion.

Stock watering

A predominant interest in the field of water conservation has been the provision of stock and domestic water supplies in Queensland's great pastoral areas, which contain more than a third of the Commonwealth's cattle and about an eighth of the sheep. In addition to the stabilisation of water supplies in the pastoral areas, the provision of water along stock routes for travelling stock has received much attention in recent years.

Main stock routes. The Queensland Irrigation and Water Supply Commission acts as consultant and constructing authority to the Stock Routes Co-ordinating Board for watering facilities on stock routes. On completion, facilities are vested in local authorities for control and maintenance. From 1935, when the scheme was inaugurated, to 30 June 1968, 678 facilities had been completed, and at 30 June 1968, sixteen facilities were under construction or investigation. A State-wide investigation is being carried out by the two authorities mentioned above to ascertain the general movement of stock, determine primary and secondary routes, register existing water facilities, and formulate a co-ordinated plan in regard to the provision of new watering facilities.

Channel Country stock routes. Under the *States Grants* (*Encouragement of Meat Production*) *Act* 1949–1954 the Commonwealth Government agreed to meet half the cost of providing additional watering facilities in stock routes leading into, along, and out of, the Channel Country and on the route from Camooweal to Mount Isa. These routes connect with the main far-western route included in the State scheme inaugurated in 1935. Under this scheme, which was completed during 1962–63, thirty-seven watering facilities have been constructed, at a total cost of $599,184.

Technical and financial assistance to farmers

'*The Farm Water Supplies Assistance Acts*, 1958 *to* 1965' are designed to improve the standard of water supply installations on individual holdings, encourage greater development in individual irrigation schemes, provide greater stability of production, and avoid losses in time of drought as well as generally increase production. To achieve this purpose, the Acts authorise the provision of technical and financial assistance to landowners for the investigation, design and installation of approved works of farm water supply. All projects for which finance is provided under the Acts are carried out under Commission guidance, and for the payment of a small charge the Commission will advise on the construction of works designed by its staff, but for which the landowners do not require financial assistance under the acts.

During 1967–68, 657 requests (446 for technical assistance only and 211 for technical and financial assistance) were dealt with in addition to advice on a further 447 requests on ground-water supplies. An amount of $1,031,916 was approved for advances under the Acts in 1967–68, and the amount advanced was $838,381.

South Australia

Brief particulars of the climatic conditions in South Australia are given on page 1129 of Year Book No. 37. (*See also* the chapter Physical Geography and Climate of this issue.)

Administration

Water supplies, other than irrigation works, are under the control of the Engineering and Water Supply Department, which administers the Waterworks Act, 1932–1966 and Water Conservation Act, 1936, both of which empower the Minister of Works to impound or divert the water from any lake, watercourse or underground source for the purpose of establishing and maintaining public water supply schemes. The Waterworks Act, 1932–1966 governs the principal reticulated water supplies in proclaimed water districts throughout the State. A feature of these supplies is the extensive network of water mains supplying country townships and farmlands where local water resources are practically non-existent.

Under the Water Conservation Act, 1936, small dams, wells, bores, rainsheds, storages and, in some instances, minor reticulation works are provided in remote areas to assist local settlers in development and to supply travellers and travelling stock.

Irrigation

Australian irrigation originated in the upper Murray in South Australia and the Mildura area of Victoria. South Australian irrigation commenced with an agreement between the Government and the Chaffey brothers in 1887 whereby an area of land at Renmark was made available for the establishment of certain irrigation works. In South Australia, irrigation is almost exclusively confined to the Murray Valley. Except for quantities held in various lock pools, no water from the Murray is stored in South Australia. Water is either pumped onto the land or gravitated from the river.

The two major authorities administering irrigation areas are the Department of Lands and the Renmark Irrigation Trust. The Trust is controlled by a local board of management consisting of seven members. This area differs from other South Australian irrigation areas in that the land is freehold instead of leasehold and is self-contained and self-controlled. Every settler is entitled to vote for the election of Trust members. The Trust maintains eighty miles of reticulation channels.

The following table shows particulars of the areas of crops and pastures irrigated in the various areas during 1967–68 and in South Australia as a whole during the seasons 1963–64 to 1967–68.

AREA OF LAND IRRIGATED: SOUTH AUSTRALIA, 1963-64 TO 1967-68

(Acres)

Season and authority	*Vine fruits*	*Tree fruits*	*Citrus fruits*	*Other crops(a)*	*Pastures*	*Total*
1967–68—						
Department of Lands Irrigation Areas—						
Orchard land—						
Berri	4,770	1,328	1,467	..	..	7,565
Cadell	448	228	182	..	..	858
Waikerie	1,502	870	1,534	..	..	3,906
Cobdogla	4,518	269	336	..	..	5,123
Moorook	280	177	301	..	..	758
Kingston	115	63	299	..	..	477
Mypolonga	..	309	536	..	..	845
Chaffey-Ral Ral Division	795	272	7	..	..	1,074
War service land settlement—						
Chaffey-Cooltong Division	411	169	597	..	..	1,177
Loxton	3,349	836	2,311	..	..	6,496
Cobdogla-Loveday Division	221	29	48	..	..	298
Reclaimed swamp land—						
Monteith	..	..	..	..	986	986
Mypolonga	..	..	..	..	1,306	1,306
Wall	..	..	..	..	544	544
Murray Bridge–Burdett Division	..	..	..	..	109	109
Mobilong Division	..	..	..	..	429	429
Long Flat	..	..	..	..	340	340
Neeta	..	..	..	..	562	562
Pompoota	..	..	..	..	425	425
Cowirra	..	..	..	..	571	571
Jervois	..	..	..	..	3,673	3,673
Total, Irrigation Areas	*16,409*	*4,550*	*7,618*	..	*8,945*	*37,522*
Renmark Irrigation Trust	5,674	1,828	1,739	..	124	9,365
Private landowners	8,533	16,777		46,428	54,553	126,291
Total, 1967–68	**30,616**	**32,512**		**46,428**	**63,622**	**173,178**
1966–67	28,268	32,122		36,061	42,306	138,757
1965–66	28,850	31,089		27,302	41,594	128,835
1964–65	28,286	30,094		28,795	35,964	123,139
1963–64	27,954	28,787		38,193	22,936	117,870

(a) Includes fodder and fallow land.

Water supply schemes

Adelaide Metropolitan Water Supply. Adelaide and surrounding areas of development including Elizabeth derive their water from eight reservoirs in the nearby Mount Lofty Ranges and by means of pumping stations and a pipeline from the Murray River at Mannum. The reservoirs have a storage capacity of 133,000 acre feet and the pipeline has a nominal capacity of 80,000 acre feet a year. The consumption for the whole area for the year 1967–68 was 94,600 acre feet, equivalent to a consumption of 90 imperial gallons per head per day. The capital cost to 30 June 1968 was $115,931,000.

Country reticulated supplies. Areas extending to a distance of 90 miles north of Adelaide are supplied from the Warren, Barossa and South Para Reservoirs (50,350 acre feet) in the Barossa Ranges. Supplies to these areas are supplemented by River Murray water delivered into Warren Reservoir through a branch from the Mannum–Adelaide pipeline. A pipeline to pump water from the River Murray at Swan Reach directly into the Warren Trunk Main at a point near Stockwell is at present under construction. Agricultural towns and areas further north are supplied from Beetaloo, Bundaleer and Baroota Reservoirs, and the Morgan–Whyalla Pipeline. The original 223-mile pipeline from Morgan to Whyalla and a second and larger pipeline completed in 1966 are at present able to carry 30,000 acre feet of water a year from the River Murray. The ultimate designed capacity of the two pipelines is 61,000 acre feet per year. A large part of Eyre Peninsula is supplied, through the 240-mile Tod River Main and the 104-mile East Coast Main, with water from the Tod River Reservoir (9,160 acre feet), the sand beds of the Uley-Wanilla Basin, the Lincoln Basin, and Polda Basin. Along the Murray River all towns are supplied from the river. Water from the river is also reticulated through adjacent farmlands for up to 30 miles, and a pipeline currently being extended from Tailem Bend to Keith will provide the means of reticulating Murray water to numerous towns and a large area of farmlands in the upper south-east. Surface and underground resources have been developed to supply most rural centres not covered by the larger schemes. Water conservation and distribution works in country districts to 30 June 1968 have cost $134,346,000 (exclusive of river control and irrigation works on the Murray River) and contain 7,975 miles of water mains.

Underground water

Underground water supplies in South Australia come under the supervision of the Department of Mines, which has explored for and developed groundwater supplies in South Australia for many years. This search has involved geological surveys throughout much of the State, supported by drilling operations carried out by departmental drilling plants.

By virtue of the Underground Waters Preservation Act, 1959–1966, the Department of Mines is empowered to exercise control over water boring operations and groundwater usage in 'defined areas'. There are at present two such areas, the North Adelaide Plains and the Kingston–Beachport area in the south-east of the State.

Results of groundwater surveys are published from time to time as Bulletins or Reports of Investigation of the Department of Mines. The *Groundwater Handbook*, published in 1959, outlines the basic principles controlling the occurrence of groundwater and the methods of drilling for, and development of, groundwater supplies.

In the north-east of the State, the deepest section of the Great Artesian Basin is not extensively developed because development costs are high in proportion to land utilisation capacity. Deep boreholes have been drilled by the Government to provide water along stock routes, and pressure waters have been utilised around the basin margin. Waters from the South Australian section of the Great Artesian Basin are generally suitable only for stock because of the composition of their salt content. The marginal waters occur at comparatively shallow depth, as at Maree township, where the artesian bore is 575 feet deep. In addition to pressure waters, non-pressure waters are sometimes obtainable at shallower depths and these provide pastoralists with stock water supplies which can be readily and economically developed.

Usage of groundwater of the Murray Basin has allowed development of the Murray-Mallee country and the south-east of the State. Mount Gambier draws its water supply from the Blue Lake, which is fed from the Basin, and many other townships obtain their water supplies from boreholes.

About 150 boreholes tap an artesian aquifer in the Kingston–Beachport area, where flow rates have exceeded 50,000 gallons per hour in some areas. This water has been extensively used for flood irrigation on improved pastures. Intensive development of the artesian aquifers in this area has resulted in falling flow rates and water levels over the past few years, and it has been found necessary to declare this area a 'defined area' in the terms of the Underground Waters Preservation Act, 1959–1966.

On Eyre Peninsula, the Uley–Wanilla Basin has been a source of groundwater since 1948, but by 1963 the water level had lowered critically, and pumping was suspended until 1966. The Lincoln Basin is now fully developed, yielding up to 20 million gallons per week, and providing water for the town of Port Lincoln since 1960. Development of the Polda 'aeolianite' aquifer began in 1962. This basin is centred 25 miles west of Lock. The present pumping plant has a capacity of 7 million gallons per week. The water is reticulated to towns and farming properties on the Upper Eyre Peninsula. Large diameter boreholes are each capable of yielding 20,000 gallons per hour. Investigations of the aeolianite aquifer are currently being undertaken in County Musgrave, to the west of the Polda area. Investigations of the South Uley Basin have been completed; one borehole yielded 100,000 gallons per hour, but a safe yield of 20 cusecs has been recommended to safeguard against aquifer depletion.

Pastoralists, farmers, market gardeners, and others have been assisted with advice on drilling, and the Department of Mines maintains and operates 24 drilling plants, which to date have developed an underground water supply potential in excess of 150 million gallons a day throughout the State. The whole of the Murray River Basin has been examined critically to ascertain the extent of land which could be used for lucerne, and considerable tracts of previously undeveloped country in the upper south-east Yorke Peninsula have been found to have usable water and have been opened up.

Farm water schemes

The Department of Mines gives assistance to individual farmers in the provision of supplies from underground sources, and the Department of Agriculture provides an advisory service on water conservation and irrigation designs, on farms, and on the suitability of underground water for irrigation and stock purposes. In addition, a great part of the farming areas is supplied with water under pressure from the extensive distribution systems connected to various reservoirs and the Murray River.

South-eastern drainage

In the south-east of South Australia it has been necessary to construct drainage schemes to dispose of surplus water from areas where a series of valleys or flats is separated by low ranges, parallel to the coastline, which prevent natural drainage. The Millicent Drainage System, completed in 1885, reclaimed 100,000 acres. The South-Eastern Drainage Area System, which is controlled by the South-Eastern Drainage Board, comprises drains constructed by the Government at national cost, plus those undertaken by the Government in co-operation with the landholders. The area is bounded on the east by the State boundary, and on the west by the sea coast. It extends from about 55 miles north of Kingston, southerly to near Millicent and Kalangadoo. Up to 1948 about 430 miles of drains had been provided at a cost of $1,441,752. These were of a developmental nature intended more to promote the rapid removal of floodwaters than to provide a complete system of drainage. Since 1948 the complete drainage of the Biscuit, Reedy Creek and Avenue Flats in the Western Division has been in progress. The southern section of 260,000 acres, which involved the excavation of 8,100,000 cubic yards and the provision of 343 miles of new or enlarged drains, has been completed. Work on the northern section of 140,000 acres is virtually complete with the construction of 85 miles of drains which involved the excavation of 2,989,880 cubic yards of material. In addition, work is in hand for the drainage of 727,000 acres of land in the Eastern Division of the south-east, situated east of Bakers Range, and extending from near Kalangadoo to north of Naracoorte. Part of the first stage of this work provided for the construction of a main diversion drain (consisting of the enlargement of an existing drain for a distance of 24 miles and the excavation of 22 miles of new drain) from Beachport to Struan. The work to date has required the excavation of 6,493,300 cubic yards of material; the total length of the diversion drain and associated relief drains is 50½ miles. Work is proceeding on the internal drainage of the area, and 530,040 cubic yards of excavation have been carried out in constructing 21¼ miles of new drains and enlarging existing drains. The capital cost of drainage in the South-Eastern Drainage Area System to 30 June 1968 was $17,672,600, and the length of drains constructed was 852 miles. An extensive system of private drains (many of which are connected to the drains constructed under Government authority) also exists in the south-east of the State.

Murray River Irrigation District

Excess waters from the irrigation of orchards in the Murray River Irrigation Districts are building up a perched water table, which is rising to the levels of the tree root system. Investigations have proved that better drainage can be obtained if the underlying limestone aquifer is fully utilised. It is doubtful, however, that large scale drainage can be absorbed by the limestone aquifer close to the river as the outflow of saline waters into the River Murray must be prevented.

Western Australia

Brief particulars of the climatic conditions in Western Australia are given on page 1133 of Year Book No. 37. (*See also* the chapter Physical Geography and Climate of this issue.)

Administration

The Minister for Water Supply, Sewerage and Drainage administers the departmental irrigation schemes under the *Rights in Water and Irrigation Act, 1914–1964*. He is advised by an Irrigation Commission representing the local irrigationists and governmental, technical and financial branches. He also administers, under the *Country Areas Water Supply Act, 1947–1964*, the water supplies to certain country towns and reticulated farmland. As Minister for Works he controls minor non-revenue producing supplies to stock routes and a few mines and agricultural areas with their associated communities. A small number of town supplies are administered by local boards under the *Water Boards Act, 1904–1964*, which provides a large degree of autonomy with ultimate Ministerial control.

Irrigation

Irrigation schemes have been established by the Government on the coastal plain south of Perth in the Waroona, Harvey and Collie River Irrigation Districts between Waroona and Dardanup, the water being channelled from dams in the adjacent Darling Range.

Logue Brook Dam with a capacity of 19,717 acre feet, Harvey Weir (6,495 acre feet) and Stirling Dam (46,191 acre feet) supply the Harvey Irrigation District, the rated area of which is 13,610 acres. The Harvey District links up with the Waroona Irrigation District, which is served by Waroona Dam (12,105 acre feet), Drakes Brook Dam (1,855 acre feet) and Samson Brook Dam (7,437 acre feet) and comprises a rated area of 3,060 acres. Wellington Dam on the Collie River with a capacity of 150,107 acre feet serves an area of 10,870 rated acres in the Collie River Irrigation District. Pastures for cattle comprise 89 per cent of water usage in these districts.

During the past thirty years a centre of tropical agriculture has been developed at Carnarvon, near the mouth of the Gascoyne River. Private pumping from sands of the Gascoyne River is the principal source of irrigation water for the 158 plantations. Because of the high risk of drawing in surrounding saline ground waters by over-pumping, the usage of water by the planters is controlled strictly by the Government. The Government is developing up-river sources and delivers water by pipeline to 29 plantations in the district. Bananas for the Perth market and fruit and vegetables for the Perth and Adelaide markets are the principal crops. A tropical research station is maintained at Carnarvon by the Department of Agriculture.

A project has been embarked upon to provide water supplies for irrigation in the area traversed by the Ord River in the Kimberley Division. The project provides for the eventual development of an area of 178,000 acres of land agriculturally and topographically suitable for irrigation. The first stage, in which water was supplied to 30 farms averaging 660 acres plus a 2,400 acre pilot farm from the Bandicoot Bar Dam with a capacity of 80,000 acre feet, was completed in 1965. Cotton has been the principal crop but in 1968 approximately 13 per cent of the cropped area was used for grain sorghum.

Construction has now commenced on an earth and rock fill dam storing 4.6 million acre feet of water to serve a further area of 148,000 acres, approximately one third of which is located in the Northern Territory.

On the Liveringa flood plain, water is diverted from the Fitzroy River through Uralla Creek to a natural storage of about 1,200 acre feet, which, together with a dam on Uralla Creek (4,600 acre feet), provides for irrigation at Camballin 65 miles south-east of Derby. Grain and fodder sorghums are grown in the area.

AREA OF LAND IRRIGATED: WESTERN AUSTRALIA, 1963-64 TO 1967-68

(Acres)

Season	*Vegetables*	*Fruit*	*Vineyards*	*Cotton*	*Other crops(a)*	*Pastures*	*Total*
1963–64 . .	9,166	10,425	966	1,526	6,153	26,958	55,194
1964–65 . .	9,379	11,710	1,081	5,496	5,259	30,110	63,035
1965–66 . .	9,944	11,566	844	8,307	6,707	30,039	67,407
1966–67 . .	9,770	11,704	795	11,892	4,676	31,790	70,627
1967–68 . .	10,148	12,808	634	11,782	2,992	35,116	73,480

(*a*) Includes fodder crops. (*b*) Not available for publication, included with Other crops.

Country water supplies controlled by Department of Public Works and Water Supply

Since 1947 enlargement and extensions of the Goldfields and Agricultural Water Supply and the development of the Great Southern Towns Water Supply have been carried out, mainly in accordance with a project known as the Modified Comprehensive Scheme. Under this scheme water has been supplied to towns and farms in an area of 4.1 million acres in mixed farming (cereal and sheep) districts of Western Australia. The modified scheme was completed in 1961 at a cost of $20.6 million, of which the Commonwealth contributed $10 million under the *Western Australia Grant* (*Water Supply*) *Act* 1948. A further request was made by the State Government in 1963 for a grant of $10.5 million representing half the estimated cost of proposed extensions which would increase by 3.7 million acres the area served by the scheme. The Commonwealth agreed to provide assistance in the form of an interest-bearing loan up to a maximum of the amount requested, advances to be made during a period of eight years commencing 1965–66. Legislative authority for the loan is given by the *Western Australia* (*South-west Region Water Supplies*) *Agreement Act* 1965.

Mundaring Reservoir on the Helena River, 26 miles from Perth, is the source of water supplied to the Eastern Goldfields. It has a capacity of 62,435 acre feet and is connected to Kalgoorlie by a pipeline with extensions to towns and agricultural areas. At 30 June 1968 the Goldfields and Agricultural Water Supply was serving 116 towns and localities, and water was being reticulated to farms in an area of 4.8 million acres. The total length of pipelines was 4,187 miles and the number of services was 26,305. Consumption during 1967–68, including supplies drawn from local schemes and from the Metropolitan Water Supply, was 3,077 million gallons.

The Great Southern Towns Water Supply pipes water from Wellington Dam to towns on the Great Southern Railway from Brookton to Katanning as well as a number of other towns. At 30 June 1968 the Supply was serving 25 towns, the total length of pipelines was 530 miles, and the number of services was 8,507. Consumption during 1967–68, including supplies drawn from local sources, was 689 million gallons.

One hundred and fourteen local schemes supply water from stream flow, dams, tanks, wells, and bores, mainly to country towns. At 30 June 1968 the total length of water mains was 857 miles and the number of services was 25,372.

Other country water supplies

As well as the schemes controlled by the Department of Public Works and Water Supply, there are four local Water Boards which draw supplies from stream flow, dams, wells, and bores. In addition, some local authorities supply water within their boundaries. The Forests Department, sawmilling companies, and mining companies operate schemes to supply water to their towns. Railways of the Commonwealth and State Governments make independent provision for supplies of water for their own purposes, although considerable additional quantities are consumed by the railways from other sources, such as those controlled by the Department of Public Works and Water Supply and the Metropolitan Water Supply, Sewerage and Drainage Board.

Underground water

Considerable use is made of underground water by individual farmers, pastoralists, market gardeners, etc., and it is estimated that over 50,000 bores are in use in the State. The quality of the water varies from place to place and much of it is too saline for irrigation or even stock. However, artesian aquifers are tapped to supply or augment the town supplies of Perth, Bunbury, Busselton, Eaton, and Denham, and non-pressure water is used in the public supplies of 37 other towns.

Considerable advances in the knowledge of aquifers and quality of water in the main sedimentary basins have been made as a result of extensive geological surveys by oil exploration companies and exploratory drilling by the Mines Department.

The Public Works Department and the Metropolitan Water Supply, Sewerage and Drainage Board are responsible for development work. The Geological Survey Branch of the Mines Department is responsible for all exploratory works, as well as for investigating and assessing the State's groundwater resources, advising local Government authorities, private industry and individuals on groundwater problems, and supervising departmental drilling.

Groundwater exploration projects are in progress or have recently been completed for the towns of Port Hedland, Exmouth, Geraldton, Morawa, Jurien Bay, Yunderup, Mandurah, Albany, Esperance and Watheroo, and additional supplies have been located for the Perth metropolitan area. A long-term systematic exploratory drilling programme in the Perth Basin is continuing.

Tasmania

Brief particulars of the rainfall pattern in Tasmania are given on page 1136 of Year Book No. 37. (*See also* the chapter Physical Geography and Climate of this issue.)

Main purposes of water conservation and utilisation

Because of the generally more adequate rainfall in Tasmania, scarcity of water is not such a problem as it is in most mainland areas, though not all streams are permanently flowing. The only large scale conservation by reservoirs is for hydro-electric power generation, but there are some moderately sized dams built by mining and industrial interests and by municipal authorities for town water supplies. 'Run of the river' schemes are quite adequate for assured supply in many municipalities.

Until a few years ago irrigated areas were negligible except for long established hop fields, but there is a rapidly expanding use of spray irrigation on orchards, pastures, potatoes, and beans. Until recent years there has been almost complete dependence on natural stream flows, but the need for some regulating storages has become apparent. Increasingly, farmers are constructing storages of their own, and the extension of this practice is foreseen as the logical solution in most areas, as valleys are narrow and steep sided. Single large reservoirs cannot economically serve large areas of suitable land, as nearly every valley is separated from others by pronounced hills, prohibiting the construction of cross-country channels.

Underground water suitable for stock, minor irrigation works and domestic use is exploited in the consolidated rocks of southern, midlands and north-western Tasmania. In the south and midlands nearly all groundwater is obtained from Permian and Triassic rocks. In the north-west, water is recovered from a variety of rocks ranging from Precambrian dolomites, quartzites and schists to Tertiary basalts and Quaternary sands. The highest yields are obtained from the dolomites and the basalts.

In the central north and north-east unconsolidated Tertiary clays and gravels yield water of variable quality, and in some coastal areas, notably King and Flinders Islands, water is obtained from Aeolian sands.

The Mines Department is charged with the investigation of underground water resources and is currently drilling in the Longford (central north) and Scottsdale-Bridport (north-east) Tertiary areas, and is also examining the prospects of coastal sand supplies on the East Coast.

Administration

In Tasmania, water supply was once exclusively the responsibility of local government authorities, but two statutory authorities now operate bulk supply schemes, piping water for distribution by the local government authorities in the Hobart and Launceston regions, and directly to certain industrial consumers. The Rivers and Water Supply Commission is empowered to take water at streams and lakes, or to issue others with licences to do so; licensing covers supply to specific industries and municipalities as well as irrigation. The Commission is concerned with drainage trusts' operations, river improvements (including repairs after flood damage), stream gauging, its own regional water schemes, and with water supply, sewerage and drainage of towns.

The second body, the Metropolitan Water Board, has overall control of water supplies to the cities of Hobart and Glenorchy and the municipalities of Kingborough, Clarence and Sorell; these authorities, however, are responsible for reticulation. The Board also controls a second scheme serving other southern municipalities. In the rest of the State, water supply is still completely a function of local government, subject to the approval of plans and finance by the Rivers and Water Supply Commission.

Regional water schemes

Four regional water schemes are in operation. The first draws water from the east bank of the River Derwent at Lawitta to provide domestic and industrial supplies in five southern municipalities, and the second, which increases existing supplies to Greater Hobart, pumps water from the west bank of the River Derwent at Lawitta. These two schemes are controlled by the Metropolitan Water Board. In addition, the State Government has constructed two other regional water schemes; the first, to serve the aluminium refinery and other industries at Bell Bay on the eastern bank of the River Tamar and to supply bulk water to several municipalities; the second, to supply water along the western bank of the Tamar. The two northern schemes are the responsibility of the Rivers and Water Supply Commission.

Potential sources capable of greater development without storage exist on the Derwent, South Esk, Huon, Lake, Mersey, and Forth Rivers. There is also a great reserve of untapped permanent streams in the western half of the State, which is largely unsettled. The State's largest rivers discharge in the west, but diversion to the eastern half of the watersheds is not regarded as practicable.

Industrial water schemes

Four principal industrial water schemes have been installed privately—for a paper mill near Lawitta on the Derwent River, for a paper mill at Burnie using water from the Emu River, for another at Wesley Vale using water from the Mersey River, and for a factory at Heybridge reticulating water from Chasm Creek. The State Government has constructed some water schemes for use primarily for industrial purposes. These include the scheme serving the aluminium refinery at Bell Bay referred to above, a storage supplementing the summer flows of the Kermandie River for use by a wood-pulping plant at Geeveston, and the Prosser River Scheme which supplies water to a sodium alginate industry at Louisville near Orford and supplements the water supply of the township of Orford.

Irrigation

There are no State irrigation projects at present, but the Rivers and Water Supply Commission is investigating the possibility of establishing several schemes, notably in the Cressy area, the Huon region, and the valleys at the Jordan and Coal rivers. The *Water Act* 1957 provides for irrigation works to be undertaken by municipalities and by trusts constituted for the purpose, but no such works have been undertaken to date. With the exception of the Lawrenny estate at Ouse, which is the largest single area under irrigation in the State, and also the only formally constituted irrigation district, there are no extensive schemes utilising one common source of water supply in Tasmania. The larger proportion of the area under irrigation is watered by pumping systems.

AREA OF LAND IRRIGATED: TASMANIA, 1963-64 TO 1967-68
(Acres)

Season	*Vegetables*	*Fruit*	*Hops*	*Other crops(a)*	*Pastures*	*Total*
1963–64 . . .	6,319	5,933	1,463	4,162	15,693	33,570
1964–65 . . .	8,302	5,955	1,553	4,318	14,194	34,322
1965–66 . . .	12,994	7,241	1,524	5,786	17,651	45,196
1966–67 . . .	12,979	8,287	1,495	6,353	18,111	47,225
1967–68 . . .	17,303	9,042	1,587	9,132	29,182	66,243

(*a*) Includes fodder and fallow land.

Northern Territory

Some particulars of the climate and main topographical features of the Northern Territory are given on page 1138 of Year Book No. 37, and in this issue information on climatic conditions will be found in the chapter Physical Geography and Climate, and a brief outline of contour and physical characteristics in the chapter The Territories of Australia.

Administration

Under the *Control of Waters Ordinance* 1938–1965 of the Northern Territory, natural waters are vested in the Crown. Where a watercourse or lake forms a boundary of any land alienated by the Crown, the beds and banks are deemed to remain the property of the Crown (except in special cases) and the diversion of water is prohibited except under prescribed conditions. There is a Mines and Water Resources Branch of the Northern Territory Administration under the control of a Director. The functions of the branch include systematic stream gauging, collection of data on surface and underground water supplies, planning of water use for irrigation and town water supplies, and flood prevention and control.

Under the *Water Supplies Development Ordinance* 1960–1963 the Mines and Water Resources Branch gives financial assistance to landholders for the development and improvement of water supplies on agricultural and pastoral leases. Another function of the branch, which is increasing in importance as it builds up a body of technical data and information about the Territory's water resources, is the dissemination of this knowledge by the provision of advice and technical assistance to professional drillers and to landholders.

Underground water

The marked seasonal rainfall over the whole of the Northern Territory is one of the basic factors affecting the pastoral industry, which provides a large proportion of the Territory's income. Underground water supplies are of great importance in the Territory, where most of the cattle numbers are dependent on underground supplies for three to five months each year, because of the inadequacy of surface water during the dry season.

Rainfall is one of the factors controlling cattle numbers, but geological features, controlling both soils and the storage of underground water, are equally important. In the northern-most portion of the Territory, which receives from 25 to 60 inches of seasonal rainfall a year, surface water supplies are, in general, adequate for the pastoral industry. Despite this, however, the area has a comparatively low carrying capacity for cattle, and the pastoral industry is concentrated more in inland areas where feed retains more nutritive value in winter, despite dry conditions. South from this well-watered northern-most portion, the Territory becomes progressively drier, with an average annual rainfall of only five inches at the margins of the Simpson Desert in the south-east corner. In the lower rainfall areas the search for potable underground water becomes exacting, but in the Ord-Victoria region and the Barkly Tablelands the best pastures are generally in areas where sub-surface conditions are suitable for the storage of underground water.

In the Ord-Victoria region the best grass lands overlie volcanic rocks and extend over some 10,000 square miles. Outcrops of sandstone, limestone and shale also occur in this area and underlie the volcanic rocks in most places. In general, these sedimentary rocks dip gently to the east, and sub-artesian conditions prevail. Underground water in this region is obtained from sandstone aquifers which yield supplies ranging up to 4,000 gallons an hour. Most of the bores are required in areas where the sediments are overlain by basalts; selection of bore sites is usually difficult. Supplies of shallow groundwater from joints, cracks and faults in the basalt are insignificant, and virtually all the bores obtain water from the sub-basalt sandstone aquifers. Successful bores in this area have ranged in depth from 200 feet to more than 900 feet. There are also small basins of younger sedimentary rocks in the region, some of which yield sub-artesian, and in places artesian, water and provide areas of good pastures.

The Barkly Tablelands, which extend into Western Queensland, overlie flat-lying limestone, sandstone and shale of the Barkly Basin. In most places underground water is under pressure but no flowing bores are known. Sandstones and beds of limestone with fractures and solution cavities provide a number of aquifers within the Basin. The hydraulic surface (to which pressure water will rise in bores) ranges between 500 and 600 feet above sea level, and adequate supplies for the watering of stock are available at depths ranging from 150 to 400 feet from the surface. The water from over 90 per cent of the bores is suitable for stock and over 50 per cent of it is suitable for human consumption. Investigations by the Commonwealth Bureau of Mineral Resources, Geology and Geophysics indicate that underground water supplies will be more than sufficient for the future development of the pastoral industry on the Tablelands.

In the Alice Springs district valuable pastures occur on a great variety of rock types, and from some of these very little underground water is available. Many shallow bores obtain water from alluvium near stream channels. There are also many successful bores in porous sands and limestone in Mesozoic and Cainozoic sedimentary basins and in some Upper Proterozoic and Palaeozoic limestones and sandstones. Small supplies of underground water are obtained from bores intersecting joint zones in metamorphic rocks and granite of Archaean age. However, except in areas close to recharge, the water quality varies from moderate to poor.

The Mines and Water Resources Branch of the Northern Territory Administration has intensified research aimed at increasing the water supplies for Alice Springs and Darwin. Bores into the Palaeozoic Mereenie sandstone, twelve miles south of Alice Springs, have intersected sub-artesian aquifiers at depths between 500 and 1,000 feet, and water from these bores is now the main source for the town supply. Promising finds of water have also been made in the Ti Tree and Dulcie basins to the north of Alice Springs, with possible potential for irrigation use. Tennant Creek obtains its water supply from two small sedimentary basins located respectively nine miles and sixteen miles south of the town, known as the Cabbage Gum and Kelly Well basins, which currently supply more than 1,000,000 gallons per week to the town reticulation. High yielding dolomite aquifers of lower Proterozoic age in the area sixteen miles south of Darwin have been developed and are augmenting the Darwin water supply.

At 30 June 1968, 5,751 bores and wells were registered in the Territory. Of these, 3,634 were for pastoral use, 324 were for agricultural use, 410 served town and domestic water supplies, 48 were in use on mining fields, 714 were investigation bores, 407 were Government established stock route bores, and 214 were classified under other uses. These include successful bores which have collapsed, and bores which were unsuccessful owing to drilling difficulties, or to insufficient quantity or poor quality of underground water.

Irrigation

There are no large water conservation projects in the Territory with the exception of the Manton Dam (12,700 acre feet), which serves Darwin with a reticulated supply. Some water is drawn from the rising main between the Manton Dam and Darwin for irrigation purposes, but the trend is for properties in this area to develop their own water supplies, either by boring or by pumping from watercourses or lakes. Investigations for additional water to augment Darwin's water supply are proceeding on the Darwin River, and in the McMinns Lagoon area.

The hydrological investigations required in the Northern Territory as part of the National Water Resources Assessment Programme are being carried out by the Mines and Water Resources Branch.

A network of base gauging stations is being built and operated for this purpose, and the results will help development planning as well as providing data for environmental scientists. In particular areas of development where water supply or irrigation proposals require surface water data, supplementary gauging stations are being built to obtain this information. Since the start of stream-gauging activity in the Northern Territory the Branch has established 305 gauging stations. As at 1 July 1968, the Northern Territory stream-gauging network comprised 221 operating stations; of these, 145 were base stations for measuring stream flow and 76 were supplementary stations.

Agricultural activity in the Territory is not extensive, being confined to the Darwin, Adelaide River, Coomalie Creek, Daly River, Katherine River, and Alice Springs areas, with only small acreages being utilised. In the Territory 55 licences to divert water from streams have been issued. The total licensed area for irrigation is 2,253 acres, but the actual area irrigated is less than this. There are also a number of farms irrigated from bore supplies, particularly in the Alice Springs area. Purposes for which irrigation water is used include the growing of fruit, vegetables, crops and pastures, and also dairying and mixed farming. Some 300 acres of irrigated rice were grown commercially on the Adelaide River in the 1964–65 season in a pilot farm project.

The Northern Territory Administration and the Commonwealth Scientific and Industrial Research Organization are investigating the potentialities of the Katherine area for agricultural production. In this area there are fifteen licensed stream diversions covering an area of 460 acres, and investigations are continuing into the possibility of using the Adelaide and Daly Rivers for irrigation. A dam site is under investigation at Adelaide River Township. The Daly River appears promising for irrigation purposes as it has a minimum dry season flow of 275 cusecs and a reliable annual flow, without regulation, of 300,000 acre feet. The mean annual flow of the river is more than 2,000,000 acre feet per year. Extensive surveys are being carried out on the coastal plains in the Daly area, including details of topography, hydrology, and soils. Surveys of a dam site at Nancar are being undertaken.

Papua and New Guinea

Rainfall in Papua and New Guinea varies considerably from approximately 240 inches near Lindenhafen (New Britain) and 230 inches at Kikori (Papua) to about 70 inches near Marienburg (New Guinea) and 40 inches at Port Moresby (Papua). For a general description of these territories *see* the chapter The Territories of Australia of this Year Book. Irrigation has not been developed on any organised basis owing to the availability of high rainfall and the nature of agricultural development.

The Territory of Papua and New Guinea is well served with large rivers deriving their water from heavy tropical rains and high mountains which rise to over 14,000 feet, but complete data regarding water resources are not available. During 1967–68 the Commonwealth Government continued to implement the policy of establishing a national network of stream-gauging stations which can be used in assessing the water resources of the Territory, while continuing to collect hydrological data for specified proposed hydro-electric projects.

The largest rivers in the Territory include the Fly (700 miles long, situated in the western division of Papua), the Sepik (700 miles), the Ramu (450 miles), the Purari (300 miles), and the Markham (110 miles). The main water conservation interest in New Guinea at present is the hydro-electric potential, which is extensive. An outline of schemes at present in operation is given in Chapter 27, Electric Power Generation and Distribution.

CHAPTER 23

FORESTRY

For further details on subjects dealt with in this chapter *see* the annual bulletins *Non-Rural Primary Industries* and (for sawmills, etc. operations) *Manufacturing Industry.*

Source of statistics

Statistics relating to forestry are, in general, provided by the various authorities concerned with forestry administration. Particulars of forest reservations contained in this chapter have been collected by the Statisticians of the various States, mainly from information provided by the State forestry authorities. Other information on forested areas, together with certain other data, has been provided by the Commonwealth Forestry and Timber Bureau. Statistics of timber and by-products have been compiled from the annual factory collections undertaken by the Statisticians in the several States. Figures of production of gums, resins and tanning barks have been provided by the State forestry authorities. Data of imports and exports of forest products and timber and timber products have been compiled in the Commonwealth Bureau of Census and Statistics as part of the statistics of overseas trade. The figures shown relate, in general, to years ended 30 June.

Forestry in Australia

Objects of forestry

The main object of forestry authorities is to manage the forests of the country in a manner that will provide the maximum benefits, both direct and indirect. Direct benefits include the provision of essential commercial commodities such as structural timber, pulpwood, plywood, veneers, firewood, bark products, tars, oil, and resins. Indirect benefits include protection of soil and stock from wind and exposure, regulation of stream flow, provision of recreational facilities, and aesthetic effects. Forestry also aims at improving existing forests and woodlands by properly controlled harvesting, by protection from such destructive agencies as fire and insect attack, and by inducing regeneration where it is desirable. The provision of a partial tree cover on denuded lands where this cover is necessary for protective purposes, and a complete cover when the land is better under forest than under any other land use, are further aims of forestry.

General account of forests and timbers

The area of land in Australia suitable for the production of commercial timber as a primary crop is very small in comparison with the size of the continent. Broadleaved forests (hardwoods) cover 97 per cent of the total forested area, and approximately 94 per cent of the broadleaved forest area is occupied by eucalypts.

Eucalypts. The genus *Eucalyptus* is remarkable in that it includes over 600 species, ranging in size from the mighty forest giants, mountain ash (*E. regnans*) of Victoria and Tasmania, and karri (*E. diversicolor*) of Western Australia, down to the small mallee species which inhabit vast areas of the inland. The habitats range from the dry inland areas to the high mountain areas in the Australian Alps, from areas with the annual rainfall as low as 10 inches to those where it is 150 inches. Of the 600 species, only about 100 are used for sawmilling, and not more than 40 of these are exploited extensively.

The better class of eucalypt forest is concentrated mainly in the higher rainfall areas such as the east coast, the highlands of southern New South Wales, Victoria and Tasmania, and the south-western corner of Western Australia. The more important species include blackbutt (*E. pilularis*), tallowwood (*E. microcorys*), flooded gum (*E. grandis*), and red mahogany (*E. resinifera*) of New

South Wales and Queensland; alpine ash (*E. delegatensis*) of New South Wales, Victoria and Tasmania; mountain ash (*E. regnans*), messmate (*E. obliqua*) and blue gum (*E. bicostata*) of Victoria and Tasmania; and karri (*E. diversicolor*) of Western Australia. For height and grandeur, mountain ash and karri are unequalled among the broadleaved trees of the world and are excelled only by a few North American coniferous (softwood) species.

In the coastal regions with lower rainfall the eucalypt forests contain many durable species such as the ironbarks, grey gums and bloodwoods of the east coast, and jarrah (*E. marginata*) and tuart (*E. gomphocephala*) of Western Australia. The spotted gum (*E. maculata*) occurring in New South Wales and Queensland is another example.

Along most of the inland streams and adjacent flood-plains there are riverain forests consisting mainly of river red gum (*E. camaldulensis*), a very durable broadleaved tree which has supplied large quantities of sawn timber, railway sleepers and fence posts.

Eucalypts also occur in open forest and savannah woodland formations in areas receiving a reliable rainfall of about 10 to 20 inches per annum, as on the goldfields of Western Australia where salmon gum (*E. salmonophloia*), brown mallett (*E. astringens*) and wandoo (*E. wandoo*) occur. These forests are of considerable value for firewood, as mining timbers and for fencing. Minor forest products such as sandalwood, tan bark, essential oils, etc., also come from isolated areas in this type of country, and in the more arid areas.

In 1967–68 the volume of eucalypt sawn wood produced was 965 million super feet.

Other broadleaved timbers (*hardwoods*). Broadleaved genera other than *Eucalyptus* cover a comparatively small portion of the forested land in Australia; however, the areas concerned provide a great variety of timbers suitable for a multitude of uses. There are two basic types of forest containing supplies of broadleaved timbers other than eucalypts, namely, the tropical and sub-tropical rainforests of coastal New South Wales and Queensland and the temperate rainforests of southern Victoria and Tasmania, both of which yield species known collectively as rainforest or brushwood species. The total volume of brushwood species produced in 1967–68 was estimated at 83 million super feet, i.e. less than 7.9 per cent of the total broadleaved timber cut in Australia.

The tropical and sub-tropical rainforest along the eastern coast of Australia contains a large number of different species. Tropical rainforest occurs in northern Queensland in the vicinity of Cairns and on the Atherton Tableland, providing such well-known cabinet woods as Queensland maple (*Flindersia brayleana*), Queensland walnut (*Endiandra palmerstonii*) and the silky oaks. The sub-tropical rainforest found in southern Queensland and northern New South Wales yields the tulip oak, crab apple (*Shizomeria ovata*) and white beech (*Gmelina leichhardtii*). Coachwood (*Ceratopetalum apetalum*) and sassafras (*Doryphora sassafras*) occur in regions to the south near Dorrigo and have yielded valuable timber for many years.

Turpentine (*Syncarpia glomulifera*), an excellent harbour pile timber resistant to marine borer attack, and brush box (*Tristania conferta*), a superior structural and decking timber, are found in association with some eucalypts in the wetter rainfall areas on the north coast of New South Wales and in southern Queensland.

Temperate rainforest which is to be seen in southern parts of Victoria and western Tasmania consists of myrtle beech (*Nothofagus cunninghamii*), but produces also southern sassafras (*Atherosperma moschata*) and blackwood (*Acacia melanoxylon*).

Conifers (*softwoods*). One of the most important species of native conifers is white cypress pine (*Callitris hugelii*). The main cypress pine forests of commercial value occur in New South Wales and southern Queensland west of the Great Dividing Range. The trees are comparatively small, but the timber has particular value owing to its durability and resistance to termites. It is suitable for use as scantlings, flooring, linings, weatherboards, poles, and posts. As much of the area originally covered by cypress pine has been cleared for wheat farming and grazing, the production from the remaining State forests is now strictly regulated to ensure a continuous supply. The volume of cypress pine cut in 1967–68 was approximately 64.8 million super feet.

Another important native conifer is hoop pine (*Araucaria cunninghamii*), which occurs naturally in the sub-tropical rainforest of southern Queensland and northern New South Wales associated with tulip oak, crab apple, white beech, coachwood, and sassafras. The greater part of the original hoop pine forests has been exploited, but considerable areas have been replanted to this species in Queensland and, to a lesser extent, in New South Wales.

Other native conifers which have played a useful but minor part in the Australian timber industry include bunya and kauri pines (*Araucaria bidwillii* and *Agathis palmerstonii*) of Queensland, and celery-top, Huon and King William pines (*Phyllocladus asplenifolius*, *Dacrydium franklinii* and *Athrotaxis selaginoides*) of Tasmania. Kauri pine is found in the tropical rainforest of northern

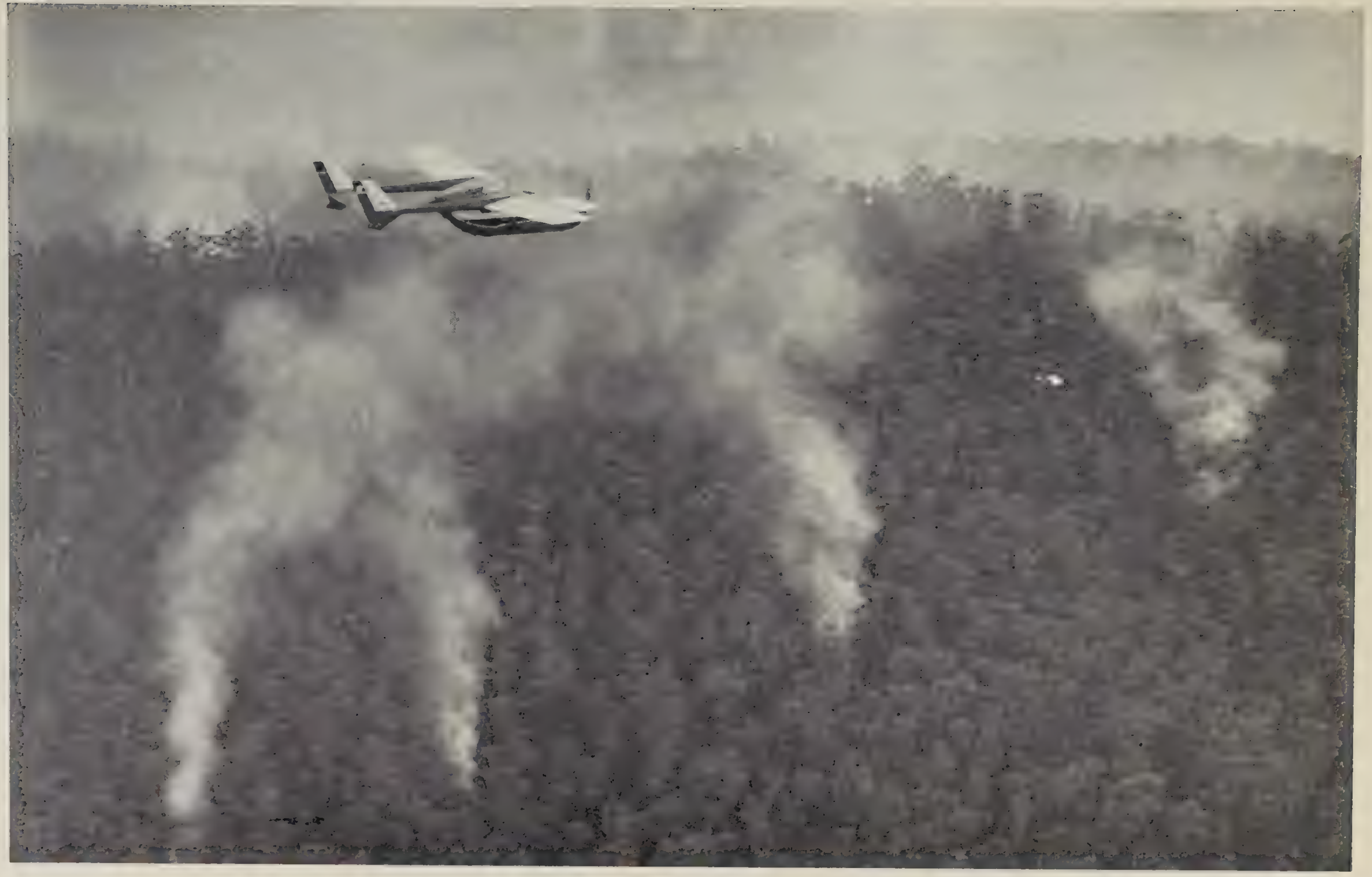


PLATE 46

Controlled fires burning after aerial release of incendiary capsules on a predetermined pattern.

FIRE
TANKER

PLATE 47

A bushfire brigade unit in operation.

Queensland in association with non-eucalypt broadleaved trees, while bunya pine occurs in the subtropical rainforests. In the temperate rainforests of Tasmania celery-top, Huon and King William pines are found in association with myrtle beech, southern sassafras and blackwood.

Extent of forested areas

Estimates prepared for the Ninth British Commonwealth Forestry Conference held in India in 1968 show the total area of forest in Australia as 599.7 million acres, or about 32 per cent of the total land area of the continent. In making these estimates the Food and Agriculture Organization definition of 'forest' (published in *World Forest Inventory*, 1958, page 123) was used. This definition includes areas of sparse or stunted tree growth, classified as 'woodland' in the following table, and in the case of Australia some four-fifths of the total forest area falls into this category. If 'woodland' is excluded from total forested area a more realistic assessment of real forest area of 87.7 million acres is obtained.

CLASSIFICATION OF FOREST AREA(*a*): AUSTRALIA
(*Source:* Forestry and Timber Bureau)
('000 acres)

Type of forest	*Area*
LANDS	
Economically exploitable forest land—	
Productive forests—	
Coniferous (softwood)(*b*)	3,021
Other(*c*)	34,166
Total, productive forests	*37,187*
Non-productive areas—unstocked(*d*)	11,455
Not economically exploitable forest land	39,038
Woodlands(*e*)	512,010
Total, forested area	**599,690**
OWNERSHIP OF ACCESSIBLE FORESTS	
Publicly-owned forests—	
State forests	29,699
Other forests	22,472
Total, publicly-owned forests	*52,171*
Privately-owned forests	29,191
Ownership not yet determined	290,166
Total, accessible forests	**371,528**

(*a*) Date of inventory 30 June 1965. (*b*) Includes exotics, cypress, and other indigenous pines. (*c*) Includes broadleaved and mixed woods. (*d*) Areas enclosed or within or adjacent to forest land, but which are kept cleared of tree cover for management reasons or 'are temporarily free' of tree cover. (*e*) All lands dominated by trees which for ecological and botanical reasons are not now capable of producing economic forest products.

Forest reserves

The distribution of forest reserves is shown by States in the following table. Detailed comparisons between States are not possible because of the lack of uniform definitions.

LEGALLY ESTABLISHED PERMANENT FOREST RESERVES: STATES AND TERRITORIES 31 MARCH 1968

(*Source:* Forestry and Timber Bureau)

('000 acres)

	N.S.W.(a)	*Vic.(b)*	*Qld*	*S.A.*	*W.A.(c)*	*Tas.*	*N.T.(b)*	*A.C.T.(d)*	*Aust.*
Production reserves—									
Productive	6,937	4,108	8,854	251	4,056	1,921	11	29	26,167
Unproductive	..	1,382	..	23	..	1,389	..	..	2,794
Unstocked	..	114	..	..	704	..	..	..	818
Total, production reserves	*6,937*	*5,604*	*8,854*	*274*	*4,760*	*3,310*	*11*	*29*	*29,779*
Protection reserves—									
Productive	20	..	..	..	33	233	..	13	299
Unproductive	..	500	2,285	17	53	..	..	97	2,952
Unstocked	..	..	..	..	28	1	..	..	29
Total, protection reserves	*20*	*500*	*2,285*	*17*	*114*	*234*	..	*110*	*3,280*
All other reserves—									
Productive	..	..	..	..	..	..	..	..	..
Unproductive and unstocked	..	151	39	..	..	..	2,394	..	2,584
Total, all other reserves	..	*151*	*39*	..	..	..	*2,394*	..	*2,584*
Total area, all reserves	**6,957**	**6,255**	**11,178**	**291**	**4,874**	**3,544**	**2,405**	**139**	**35,643**

(*a*) Not comparable with previous years due to a difference in definition on which estimates were based. (*b*) As at 31 March 1967. (*c*) South-west zone only. (*d*) In the Australian Capital Territory there are no permanent forest reserves, only managed forests.

Categories of forest reserves

(i) *Production Reserves* consist of forest lands 'permanently' reserved—by law whether Federal, State or local—for the production of logs, pulpwood, pit props, poles, posts or fuelwood for commercial purposes.

(ii) *Protection Reserves* consist of reserved lands, the management of which is principally aimed at the protection of natural resources, of fauna and flora, or at other purposes not directly related to the production of wood (e.g., parks, watersheds, soil conservation areas, etc.). Industrial cutting may or may not be allowed in these Protection Reserves. Industrial cutting includes the cutting of logs, pulpwood, pit props, poles, posts, fuelwood for commercial purposes. The production of logs for the production of sawnwood for local consumption is considered as industrial cutting; however, the cutting of poles and fuelwood for personal consumption on a casual or occasional basis is not considered as an industrial cutting.

(iii) *All other reserves* consist of reserved forest lands not included above.

A considerable proportion of the permanently reserved areas is in inaccessible mountainous country, and many of the forests contain a mixture of species, only some of which are at present of commercial value. Much of the area consists of inferior forest, and a large proportion of the whole has been seriously degraded by recurrent fires.

Plantations

The indigenous forest of Australia does not contain adequate supplies of coniferous timber, and Australia's requirements have had to be met largely by imports. As a result of the planned policy of the forest services and of several private commercial organisations, the area of coniferous plantations, mainly of exotic species, is steadily increasing. It was natural that this aspect of forestry should receive earliest attention in South Australia, as this is the State most poorly endowed with natural forest. South Australia now has a larger area of planted conifers than any other State in Australia, and for some years has been exploiting considerable quantities of timber from these plantations. Production is also increasing in the other States, and the thinnings from their plantations are already supplying a significant volume of timber.

The total production of roundwood from Australia's coniferous plantations is now more than 75 million cubic feet per annum and is expected to increase substantially during the next decade.

A special article prepared by the Forestry and Timber Bureau giving a detailed account of the history and development of coniferous plantations and of the characteristics of individual species is included in Year Book No. 44, page 975.

Broadleaved plantations (mainly *Eucalyptus spp.*) comprise a much smaller area, and the total acreage at 31 March 1968 was about 34,000 acres, about two-thirds of which was mallee. Plantations of this species have been established in Western Australia for tan bark production.

AREA OF CONIFEROUS PLANTATIONS: STATES AND TERRITORIES, 31 MARCH 1968

(*Source:* Forestry and Timber Bureau)

(Acres net)

	Government			*Private*			
State or Territory	*Pinus radiata*	*Other species*	*Total*	*Pinus radiata*	*Other species*	*Total*	*Grand total*
New South Wales	112,192	19,319	131,511	7,804	16,381	24,185	155,696
Victoria	68,868	9,668	78,536	98,681	3,052	101,733	180,269
Queensland	3,448	130,068	133,516	840	27,550	28,390	161,906
South Australia	130,958	12,808	143,766	39,000	..	39,000	182,766
Western Australia(*a*)	21,799	31,177	52,976	1,888	188	2,076	55,052
Tasmania	31,135	419	31,554	13,113	3	13,116	44,670
Northern Territory	..	1,500	1,500	..	50	50	1,550
Australian Capital Territory	26,815	2,217	29,032	..	..	..	29,032
Australia	**395,215**	**207,176**	**602,391**	**161,326**	**47,224**	**208,550**	**810,941**

(*a*) South-west zone only.

Forest administration and research

Commonwealth Forestry and Timber Bureau. The functions of the Commonwealth Forestry and Timber Bureau are laid down in the *Forestry and Timber Bureau Act* 1930–1953 and include forestry research and education, the study of timber supply, and advice to the Government on forestry matters. The administering department is the Department of National Development.

In 1961 the Commonwealth Government decided to expand its activities in forestry research in Australia. The existing Forestry and Timber Bureau Divisions of Silvicultural Research and Forest Management Research were combined to form the Forest Research Institute as a separate branch of the Bureau. The purpose of the Institute is to provide complete coverage in forestry research, ensuring that all problems of primary importance to the practice and development of forestry in Australia are investigated. In developing a programme with this objective, the Institute takes account of the research activities and potential of the State forest services and other organisations. The research work carried out by the existing sections of the Forest Research Institute covers a wide range of studies, including the following: factors affecting tree growth, tree breeding, introduction of exotic species, forest nutrition, forest botany, forest entomology and pathology, fire protection, watershed management, forest mensuration, forest management and management economics, aerial inventory, biometrics, and tree seed. The Forest Research Institute maintains six regional establishments in the Commonwealth, two of which have an outstation in addition to the regional headquarters. These regional stations are run on a co-operative basis with State forest services and private forest companies or other government instrumentalities.

The Forestry and Timber Bureau also maintains a Timber Supply Economics Branch concerned with the compilation and analysis of statistics of production, consumption and trade in timber and other forest products. This Branch also carries out studies in forest economics and research into logging methods and machines. Advice on timber supply matters is currently made available to government departments and private enterprise. Research is also undertaken on matters associated with the marketing of timber products.

Commonwealth Scientific and Industrial Research Organization, Division of Forest Products. The Division of Forest Products was formed in 1928 to carry out investigations into Australian forest products, assist in the effective use of such products, reduce waste, reduce losses from decay and insect attack, and conduct research into the fundamental chemical, physical and mechanical properties of Australian timbers.

The research work of the Division is carried out by eight separate sections: wood and fibre structure, wood chemistry, timber physics, timber mechanics, timber preservation, timber seasoning, plywood and glueing, and timber utilisation. In addition, the Division provides assistance to individuals and local industry, administers courses of instruction on timber properties and usage, and maintains co-operative projects with several overseas authorities operating in the same field.

Forestry in the Territories. Forestry activities in the Territory of Papua and New Guinea are controlled by the Administration through its Department of Forests. The management of forests in the Australian Capital Territory is the responsibility of the Forestry Branch of the Department of the Interior.

The Forestry and Timber Bureau advises the Administrations of the Australian external Territories on the management of the forests in those Territories. Forests in the Northern Territory are under the control of the Forestry Branch of the Northern Territory Administration.

Forestry activities of the States. Forestry on State-owned lands in the various States is the responsibility of the respective State Governments, but they do not exercise any control over forestry activities on private property. The powers and functions of State forest authorities are laid down under forest Acts and Regulations. In each State there is a department or commission to control and manage State forests. Its functions include the introduction of proper measures for the control and management of forest land; the protection of forest land; the conversion, marketing and economic utilisation of forest products; the securing of an adequate and permanent reservation of State forests; and the establishment and maintenance of coniferous forests to remedy the existing deficiency of conifers in Australia. All State forest services are actively engaged on research programmes. Annual reports are issued by each State forest authority.

In addition to developing permanent forest reserves in each State, foresters are surveying all forested Crown lands with a view to obtaining dedications of new State forests to add to the permanent forest estate or to release for other uses areas unsuitable for forestry. State forest authorities control over 10 million acres of timber reserves, national parks, etc. They also usually control all timber on unoccupied Crown lands.

Private forestry. Privately owned lands contribute considerably to the total production from Australian forests. The most important areas of managed native forest in private ownership are the forests owned by pulp and paper companies. Schemes of financial assistance to individual land owners—designed primarily to encourage establishment and management of coniferous plantations—have been introduced by the Governments of New South Wales and Victoria.

The area of privately owned coniferous plantations is rapidly increasing, and here again the pulp and paper companies are very active. In step with the increase in afforestation programmes, the number of professional foresters employed in private forestry enterprise is increasing, while several are engaged on research.

An estimate of the area of coniferous plantations established by private companies and individuals is included in the table on page 963.

Forestry education

The functions of the Australian Forestry School at Canberra, previously a division of the Forestry and Timber Bureau, were taken over by the Australian National University at the beginning of the 1965 academic year. The school was absorbed into the University's School of General Studies as the Department of Forestry. This department provides a full four-year training leading to the degree of B.Sc. in forestry. The University of Melbourne also maintains a School of Forestry which gives training leading to a B.Sc. degree in forestry. The Universities in all States provide facilities for post-graduate studies in forestry leading to higher degrees.

The Victorian Forests Commission maintains a Forestry School at Creswick where recruits are trained, mainly for employment in the Commission.

The Australian Forestry Council

Following extensive discussions the Commonwealth Government and the Governments of the six Australian States agreed in 1964 to establish an Australian Forestry Council, comprising the Ministers responsible for forestry in the seven Governments and the Commonwealth Ministers of the Interior and External Territories.

The Council is intended to provide the means for the mutual exchange between the State and Commonwealth Governments of information and views on forestry. It will co-ordinate research into problems affecting the establishment, development, management, and fire protection of all forests, and the utilisation of forest products. It will assist in co-ordinating the work of State and Commonwealth Governments and also private enterprise in the development of Australian forestry.

The Council is supported by a Standing Committee, consisting of the Director-General of the Forestry and Timber Bureau, the heads of each of the six State Forest Services, the Chief of the Division of Forest Products, C.S.I.R.O., the Secretary of the Department of the Interior and the Secretary of the Department of External Territories.

Fire protection

The provision of adequate fire protection is one of the main problems facing forest and rural authorities. The commercial forest area is estimated at 37 million acres with a further 39 million acres of forest not at present exploitable. The forest services maintain a high degree of protection over a relatively accessible area of about 23 million acres, about 17 million acres in the more inaccessible area receive a lesser degree of protection, and about 8 million acres are at present not protected. The remaining area of 28 million acres is mainly vacant Crown Land or is privately owned or leased, and under some degree of fire protection from the rural volunteer fire-fighting organisations or Government-financed fire protection associations.

During the 1967–68 fire season a total of 1,754 fires were recorded over the area of 40 million acres of forest land afforded either intensive or extensive protection. An area of 754,000 acres was burnt by these fires, which represents 1.9 per cent of the area protected. This is the fifth largest area of forest land burnt over the last twelve years.

A large proportion of this burnt area was located in Victoria and southern New South Wales where particularly severe drought conditions prevailed throughout most of the summer and autumn period. The drought index exceeded a value of 700 on a scale of (0–800) over most of the forest land at higher elevations in the Australian Alps and was one of the severest droughts experienced in this region for over 100 years. Although large areas of forested land were in a state of extreme dryness, the absence of strong dry continental winds prevented severe 'blow-up' conditions, which result in extreme fire danger, except on a few isolated days.

The number of forest fires and the forest area burnt over the last twelve years is shown in the following table.

NUMBER OF FIRES AND FOREST AREA BURNT, 1956-57 TO 1967-68

	Protected forest areas (a)		
Year	*Number of fires*	*Forest area burnt*	*Percentage of forest area burnt*
		'000 acres	
1956–57	1,999	344	0.9
1957–58	2,908	2,078	5.2
1958–59	1,175	456	1.1
1959–60	1,504	1,314	3.3
1960–61	2,667	1,294	3.5
1961–62	1,761	297	0.8
1962–63	1,299	275	0.7
1963–64	1,494	549	1.5
1964–65	2,307	1,626	4.1
1965–66	1,865	465	1.2
1966–67	1,422	388	1.0
1967–68	1,754	754	1.9

(*a*) The area receiving protection has been taken as the 40 million acres for which State forest services provide protection.

Although drought conditions were not particularly severe along the coastal area of New South Wales and Queensland during the summer and autumn months of 1968, drought breaking rains which occurred over Victoria and southern New South Wales during May 1968 did not extend to the coast. Drought conditions thus prevailed during the winter months and intensified during the spring. Widespread fires occurred along the entire eastern seaboard from September onwards and an area of around 5 million acres of forested land was burnt in Queensland and New South Wales.

Very intensive fire protection is afforded to the coniferous plantation area of Australia. This area is increasing rapidly and the annual planting programme is now between 60,000 and 70,000 acres. During the 1967–68 fire season a total of 288 acres were burnt, representing 0.04 per cent of the area of 729,928 acres for which fire statistics are available. This was the smallest area of coniferous plantation burnt during the last twelve years.

The area of coniferous plantations burnt during the past twelve years is shown in the following table.

CONIFEROUS PLANTATIONS: AREA BURNT AND TOTAL AREA, 1956-57 TO 1967-68

Year	*Area burnt*	*Area of coniferous plantations*	*Percentage of coniferous area burnt*
	acres	acres(*a*)	
1956–57 . . .	1,317	360,000	0.37
1957–58 . . .	1,339	386,000	0.35
1958–59 . . .	1,594	402,000	0.40
1959–60 . . .	329	435,000	0.07
1960–61 . . .	507	452,000	0.11
1961–62 . . .	598	472,000	0.13
1962–63 . . .	475	492,000	0.10
1963–64 . . .	418	515,000	0.06
1964–65 . . .	3,130	556,000	0.56
1965–66 . . .	1,520	610,000	0.25
1966–67 . . .	461	660,835	0.07
1967–68 . . .	288	729,928	0.04

(*a*) This area does not include some 81,000 acres of privately owned coniferous forest for which fire statistics are not available.

Protection of private property outside urban areas is undertaken by volunteer bush fire brigade organisations which are co-ordinated in each State by a committee or board carrying out functions of an advisory or educational nature and fostering the growth and organisation of the bush fire brigade movement. Throughout the main agricultural and forest areas of Australia there are over 5,000 registered volunteer bush fire brigades with a membership approaching 300,000. Although forest and rural fire organisations are entirely separate entities, a high degree of co-operation and liaison is maintained.

In addition to the forest service and rural organisations, various private and semi-governmental bodies in each State maintain fire protection organisations, which are generally concerned with the protection of private forestry operations and hydro-electric and water catchment areas.

Over the five-year period 1964 to 1968 the annual cost of protecting from fire the 40 million acres of forest land for which State forest services, semi-governmental bodies and private companies provide protection is estimated at $6,000,000 or about 15 cents an acre. The cost of rural fire control as a whole cannot be estimated with any degree of accuracy because by far the greatest contribution comes from the personal efforts of volunteer brigade members.

The Australian fire season is very variable, especially in the eastern and southern States. On the average, damaging fires can occur over a period of four months in all climatic zones. Occasionally this occurrence can extend one month either side of the main fire period. Individual fire seasons are generally of much shorter duration than four months, and the severity of a season is judged more on the number of 'blow-up' days of extreme fire danger than on its length. On the average, four years in ten are classified as of average severity and two years in ten as severe, the remaining four years being of below-average severity. During severe seasons in the past as much as 15 per cent of the protected forest area has been burnt. However, with improving fire control services, it can be expected that the area burnt in severe fire seasons will in future be significantly reduced.

Intensive research work is being carried out on bushfire problems and both Commonwealth and State agencies maintain active research groups.

Research into the factors affecting fire behaviour has resulted in improved fire fighting techniques and safety on the fireline. In addition, research in this field has led to a greater knowledge of the effect of controlled burning on resource values and has permitted precise prescriptions to be laid down so that the work of hazard removal in forested country can be carried out more expeditiously and with greater safety.

Recent developments of techniques of aerial control burning have greatly reduced costs and permit larger areas to be burnt during favourable weather conditions. Small incendiary capsules are dropped from fixed wing aircraft or helicopters on a predetermined grid pattern at a rate of one incendiary every 5 or 10 acres (*see* Plate 46) and the resulting fires burn together slowly and remove excessive accumulations of fuel which have built up in the absence of fire. These very low intensity fires have low flame heights and seldom scorch the leaves on the standing forest trees. The cost of this type of control burning is around 4–5 cents per acre and one aircraft can cover an area of 15,000–20,000 acres in an afternoon. Care is taken to confine the fires within the area specified for treatment.

This technique of aerial control burning is unique to Australia and all the associated equipment and the incendiary capsule were developed by Australian fire research groups.

Control burning of forested country is one positive way in which damage from wildfires can be reduced. During 1968 an area of some 2 million acres was control burnt and of this area over 50 per cent was burnt by aerial ignition techniques (*see* Plate 46). During 1969 it is expected the area will increase to around 2½ million acres.

Research is continuing into the use of water bombing aircraft for the suppression of fires caused by lightning which occur in remote forested areas not readily accessible to conventional ground suppression forces. The Victorian Forests Commission now has an aerial attack system in operational practice and the use of light agricultural aircraft in this role is extending to other States. A programme of evaluation of all agricultural aircraft available for use in aerial fire suppression has been recommended by the Australian Forestry Council and is being carried out by the Forestry and Timber Bureau of the Department of National Development.

A special infra-red fire detector has been recently developed in Australia which will permit the location and mapping of bushfires through heavy continuous smoke. It will be especially valuable in picking up spotfires which may have been thrown long distances ahead of a bushfire and which are normally obscured by the heavy smoke pall. This latest equipment covers a range of wavelengths from 1–15 microns and can be operated from light aircraft.

Since fire prevention is one of the most important aspects of the problem, intensive campaigns are being conducted to reduce the incidence of man-caused fires. A study of fire causes in recent years reveals that human agencies account for about 90 per cent of all fires, and of this figure at least 80 per cent are preventable. It is estimated that 'burning-off' (much of which is started illegally) accounts for 30 per cent of all fires. Lightning accounts for a little over 10 per cent of all fires in Australia, although the incidence of fires caused by lightning is much higher in certain areas, especially the southern highlands regions in New South Wales and Victoria. Although lightning is a relatively small numerical cause of fire, the percentage area burnt from this cause is estimated at about 20 per cent. This higher figure is due to the occurrence of multiple fire outbreaks which cause fire fighting difficulties, and to the inaccessibility of the areas in which such fires generally occur.

An increasing number of fires are starting from roadsides, and smoking materials account for a high proportion of these fires. The fire proofing of roadsides by chemical and mechanical means should reduce this incidence, which has accounted for over 25 per cent of all fires in some regions.

The damage resulting from bushfires in Australia is difficult to estimate. Eucalypts, which comprise the main forest species are seldom killed by fire, and damage estimates frequently involve the complicated question of loss of increment and degradation of timber quality. It may be conservatively estimated that damage to forest values lies between $2 and $4 per acre burnt per year and that over the last ten years the average value of forest fire damage is of the order of $4 million a year. In very severe fire seasons such as 1925–26, 1938–39 and 1951–52, which affected large areas of the continent, fire losses may have been as high as $200 million. The monetary damage resulting from the Tasmanian bushfires of 7 February 1967 was estimated at $40 million over the 640,000 acres burnt in Tasmania. These fires involved heavy housing losses in the city of Hobart and surrounding townships.

Commonwealth loans to expand softwood plantations

In February 1965 the Australian Forestry Council recommended that the rate of expansion of softwood timber planting in Australia should be increased from their existing level of about 40,000 acres a year to 75,000 acres a year for the next thirty-five years. The recommendations envisaged a phased increase in the rate of Government plantings by the various State Governments up to a level of some 65,000 acres per annum, and an average of at least 10,000 acres per annum by private forest owners. This programme would make a major contribution towards meeting Australia's future requirements for softwood products.

In February 1966 the Commonwealth Government endorsed this recommendation and agreed, as a first step towards achieving the proposed annual target of 75,000 acres, to provide financial assistance to each State, over a five-year period commencing 1 July 1966, to enable them to accelerate their rate of softwood plantings. The assistance, which will be provided to the States under section 96 of the Constitution, will take the form of long-term loans repayable over twenty-five years with repayments of principal and the payment of interest to commence ten years after the date of each advance. The *Softwood Forestry Agreements Act* 1967 authorised the Commonwealth to enter into agreements with each of the States to provide financial assistance by way of loans during the financial years 1966–67 to 1970–71 inclusive. Payments under the Act by the Commonwealth to all States in 1966–67 amounted to $291,000, in 1967–68 to $3,456,000, and in 1968–69 to $3,872,000. It is estimated that $4,879,000 will be provided in 1969–70.

Employment in forestry

Persons engaged in forestry activities, 1966 census

The number of persons whose industry statements were classified to 'forestry' (excluding sawmilling) at the 1966 population census was 13,492 out of a total of 512,994 in all primary industries and 4,856,455 in the total work force. For further information *see* the chapter Employment and Unemployment, also 1966 Census Bulletin No. 9.6, *Population: by Industry and Occupational Status, Australia.*

Employment by Forestry Departments

In the table following details are shown of the number of persons employed by State forestry departments and by the Forestry and Timber Bureau in the Australian Capital Territory and the Northern Territory at 30 June 1968.

PERSONS EMPLOYED BY FORESTRY DEPARTMENTS
STATES AND TERRITORIES, 30 JUNE 1968

Occupational group	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Professional staff	306	237	162	75	66	45	9	10	910
Non-professional field staff	282	175	103	12	247	119	22	2	962
Clerical staff	286	281	223	112	56	86	12	6	1,062
Extraction of timber	1,560	. .	112	. .	40	6	20	. .	7,078
Milling of timber		. .	. .	555	43	. .	5	. .	
Labour (forest workers, etc.)		1,591	1,736	313	586	349	92	70	
Total	**2,434**	**2,284**	**2,336**	**1,067**	**1,038**	**605**	**160**	**88**	**10,012**

Employment in milling operations

Details of the average number of persons employed, including working proprietors, in sawmills during the year 1967–68 are shown in the next table. Further details regarding the operations of sawmills in 1967–68 are shown in the chapter Manufacturing Industry.

NUMBER OF SAWMILLS AND NUMBER OF PERSONS EMPLOYED
STATES AND TERRITORIES, 1967-68

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Number of sawmills	685	442	478	86	199	274	. .	8	2,172
Average number of persons employed during year—									
Males	7,713	5,645	5,055	(*a*)	3,201	2,745	. .	(*a*)	26,498
Females	392	293	302	(*a*)	191	56	. .		1,415
Persons	*8,105*	*5,838*	*5,357*	(*a*)	*3,392*	*2,801*	. .		*27,913*

(*a*) Not available for publication; included in Australian total.

Forest production

Forest products

FOREST PRODUCTION(*a*): STATES AND TERRITORIES, 1967-68

Product		*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Logs for sawing, peeling, slicing, or pulping—										
Forest broadleaved	'000 cu ft	55,669	70,129	21,004	429	49,553	63,095	19	. .	259,898
Brushwoods and scrubwoods	,, ,,	4,157	. .	8,598	. .	. .	. .	. .	. .	12,755
Coniferous—										
Indigenous forest 'pines'—										
Cypress	,, ,,	6,099	. .	6,003	. .	. .	. .	77	. .	12,179
Other	,, ,,	609	. .	2,493	. .	. .	373	. .	. .	3,475
Plantation grown 'pines'	,, ,,	9,214	14,037	4,773	26,049	2,413	1,852	. .	1,460	59,798
Total logs	,, ,,	*75,748*	*84,166*	*42,871*	*26,478*	*51,966*	*65,320*	*96*	*1,460*	*348,105*
Value of logs	$'000	*23,248*	*23,235*	*14,784*	*5,421*	*9,459*	*14,745*	*254*	*353*	*91,498*
Hewn and other timber (not included above)—										
Firewood(*b*) (weight)	'000 tons	201	305	70	397	561	377	2	. .	1,914
Other(*c*) (value)	$'000	10,344	2,477	2,197	307	(*d*)1,320	264	4	12	16,925
Value of hewn and other timber	,,	11,583	4,459	2,589	2,641	(*d*)3,948	2,455	24	12	27,712
Other forest products(*e*) (total value)	,,	309	151	309	66	(*f*) 12	3	. .	. .	851
Total value of forest products	,,	**35,140**	**27,845**	**17,683**	**8,128**	**(*g*)14,077**	**17,209**	**278**	**365**	**(*g*)120,725**

(*a*) Excludes some production from private land, thought to be relatively small, details of which are not available. (*b*) Excludes mil waste used as firewood. (*c*) Includes sleepers, transoms, girders, bridge timbers, mining timber, poles, piles, etc. (*d*) Excludes timbe used for tannin extract, details of which are not available for publication. (*e*) Includes charcoal (forest production only), tanning bark essential oils, eucalyptus leaves, crude rutin, etc. (*f*) Excludes value of sandalwood and substitutes, details of which are not available for publication. (*g*) Includes timber used for tannin extract and sandalwood and substitutes.

FOREST PRODUCTION(*a*): AUSTRALIA, 1963-64 TO 1967-68

Product		*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Logs for sawing, peeling, slicing, or pulping—						
Forest broadleaved	'000 cu ft	245,675	251,753	252,587	249,985	259,898
Brushwoods and scrubwoods	,, ,,	12,741	13,549	14,027	12,131	12,755
Coniferous—						
Indigenous forest 'pines'—						
Cypress	,, ,,	13,070	13,795	12,487	11,402	12,179
Other	,, ,,	3,950	3,766	3,706	3,568	3,475
Plantation grown 'pines'	,, ,,	50,883	56,255	59,894	61,992	59,798
Total logs	,, ,,	*326,318*	*339,117*	*342,701*	*339,078*	*348,105*
Value of logs	$'000	*79,578*	*86,493*	*87,804*	*88,405*	*91,498*
Hewn and other timber (not included above)—						
Firewood (*b*) (weight)	'000 tons	2,329	2,322	2,301	2,143	1,914
Other (*c*) (value)	$'000	13,899	15,255	17,290	15,470	16,925
Value of hewn and other timber(*d*)	,,	27,357	28,537	31,177	28,106	27,712
Other forest products(*e*) (total value)	,,	584	1,167	782	801	851
Total value of forest products(*f*)	,,	**107,951**	**116,338**	**120,589**	**117,975**	**120,725**

(*a*) Excludes some production from private land, thought to be relatively small, details of which are not available. (*b*) *See* footnote (*b*) to previous table. (*c*) *See* footnotes (*c*) and (*d*) to previous table. (*d*) Incomplete; *see* footnote (*d*) to previous table. (*e*) *See* footnotes (*e*) and (*f*) to previous table. (*f*) Includes timber used for tannin extract and sandalwood and substitutes in Western Australia.

Value of production

While statistics of both the gross value (at principal markets) and local value (at place of production) of the forestry industry are available, particulars of the value of materials used in the process of production are not available for all States. For this reason values cannot be stated on a net basis, as has been done with most other industries. A more detailed reference to the value of production of forestry and other industries in Australia, as well as a brief explanation of the terms used, will be found in the chapter Miscellaneous.

GROSS AND LOCAL VALUE OF FORESTRY PRODUCTION STATES AND TERRITORIES, 1967-68

($'000)

State or Territory	*Gross value(a)*	*Marketing costs*	*Local value(b)*
New South Wales	35,140	931	34,209
Victoria	27,845	397	27,448
Queensland	17,683	4,735	12,948
South Australia	8,128	28	8,100
Western Australia	14,077	803	13,274
Tasmania	17,209	2,442	14,766
Northern Territory	278	n.a.	278
Australian Capital Territory	365	n.a.	365
Australia	**120,725**	**9,336**	**111,388**

(*a*) Gross production valued at principal markets. (*b*) Gross production valued at place of production.

LOCAL VALUE OF FORESTRY PRODUCTION: STATES AND TERRITORIES 1963-64 TO 1967-68

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
				LOCAL VALUE ($'000)					
1963–64 . .	29,619	25,308	12,980	8,167	10,783	11,639	269	298	99,062
1964–65 . .	31,586	28,358	13,482	8,801	11,334	13,270	276	314	107,421
1965–66 . .	32,342	28,870	13,590	9,693	11,965	13,837	358	384	111,039
1966–67 . .	30,967	29,036	12,631	8,853	12,473	14,332	303	351	108,946
1967–68 . .	34,209	27,448	12,948	8,100	13,274	14,766	278	365	111,388
				LOCAL VALUE PER HEAD OF POPULATION ($)					
1963–64 . .	7.26	8.24	8.14	7.98	13.50	32.08	5.36	3.87	8.96
1964–65 . .	7.62	9.04	8.29	8.37	13.87	36.22	5.23	3.72	9.52
1965–66 . .	7.68	9.04	8.19	8.96	14.29	37.44	6.46	4.15	9.66
1966–67 . .	7.25	8.94	7.48	8.02	14.47	38.33	5.22	3.51	9.31
1967–68 . .	7.87	8.31	7.54	7.24	14.87	38.92	4.57	3.37	9.34

Timber and timber products

Mill production of timber

Particulars of logs treated and the production of sawn, peeled and sliced timber by sawmills and other woodworking establishments are shown in the following table. These figures have been compiled from annual factory collections, which cover virtually all sawmills. The only omissions are some small portable mills operated by itinerants, e.g. sleeper cutters.

OUTPUT OF AUSTRALIAN-GROWN TIMBER: ALL MILLS STATES AND TERRITORIES, 1967-68

('000 super ft)

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Total(a)
Logs treated (gross hoppus)(b)—							
Broadleaved . .	689,357	499,225	327,363	6,800	467,028	352,122	2,341,895
Coniferous . .	118,497	74,030	114,586	201,805	17,121	6,926	532,965
Total, logs treated .	*807,854*	*573,255*	*441,948*	*208,605*	*484,149*	*359,048*	*2,874,860*
Sawn, peeled or sliced timber produced from logs above—							
Broadleaved . .	361,219	283,184	151,617	4,006	201,993	171,912	1,173,931
Coniferous . .	69,934	36,718	64,050	124,085	9,643	3,254	307,684
Total, timber produced . .	*431,153*	*319,903*	*215,666*	*128,091*	*211,637*	*175,165*	*1,481,615*

(a) Excludes Australian Capital Territory and Northern Territory. (b) Gross hoppus measure is approximately 78.5 per cent of the true volume.

OUTPUT OF AUSTRALIAN-GROWN TIMBER, ALL MILLS: AUSTRALIA(*a*) 1963-64 TO 1967-68

('000 super ft)

	1963–64	1964–65	1965–66	1966–67	1967–68
Logs treated—					
Broadleaved	2,681,691	2,767,843	(*b*)2,371,263	(*b*)2,313,256	(*b*)2,341,895
Coniferous	696,831	728,691	(*b*)569,521	(*b*)554,838	(*b*)532,965
Total, logs treated . . .	*3,378,522*	*3,496,535*	*(b)2,940,784*	*(b)2,868,093*	*(b)2,874,860*
Sawn, peeled or sliced timber produced from logs above—					
Broadleaved	1,157,175	1,203,705	1,185,831	1,151,369	1,173,931
Coniferous	330,014	329,508	331,709	317,591	307,684
Total, timber produced . .	*1,487,189*	*1,533,213*	*1,517,540*	*1,468,960*	*1,481,615*

(*a*) Excludes Australian Capital Territory and Northern Territory. (*b*) Gross hoppus basis: not necessarily comparable with details for previous years, which are generally on a true volume basis.

In addition to the mill production of timber shown in the preceding tables, a large quantity of hewn and round timber, e.g. sleepers, piles, poles, fencing timber, timber used in mining and fuel, is obtained directly from forest and other areas. Complete information in respect of the volume of this output is not available.

Veneers, plywood, etc.

Cutting of timber for the manufacture of veneers, plywood, etc., has been carried out in most States for a number of years. In recent years this has been considerably extended, since plywood manufacture has allowed the use of some species unsuitable for sawing. Special attention has been paid to ensure that logs suitable for peeling are diverted to ply factories.

PLYWOOD PRODUCED: STATES, 1963-64 TO 1967-68

('000 square feet: $\frac{3}{16}$-in basis)

State	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
New South Wales . .	58,880	59,045	54,201	58,791	63,909
Queensland . . .	97,252	94,766	80,761	81,313	93,185
Other States . . .	60,150	63,249	52,296	60,348	71,929
Australia . .	**216,282**	**217,059**	**187,258**	**200,451**	**229,023**

Of the total plywood produced in 1967–68, 128,672,850 square feet ($\frac{3}{16}$-in basis) were classed as 'Commercial', 73,331,689 as 'Waterproof', 2,664,942 as 'Case', and 24,353,525 as 'Sliced fancy'.

During 1967–68, 828.8 million square feet ($\frac{1}{16}$-in basis) of veneers were produced by the rotary process for the manufacture of plywood, including 260.5 million square feet ($\frac{1}{16}$-in basis) sold or added to stock, the bulk of which would eventually be used in the production of plywood. In addition, 73.4 million square feet of sliced veneers were produced.

Manufactured boards

Particle board, resin or cement bonded of acoustic and other composition, amounted to 115,579,513 square feet surface measurement during 1967–68.

Wood pulp and paper

Wood pulp. During 1967–68 wood pulp production was 351,268 tons of chemical, mechanical and other pulp. During the previous year production was 357,665 tons.

Detailed information relating to the types and methods of production of wood pulp in the various States was published in Year Book No. 50, 1964, page 1110.

Paper and paper board. Paper and paper board are manufactured in all States, but the greater part of the industry is in New South Wales, Victoria and Tasmania. During 1967–68 twenty-one paper mills were operating, nine in Victoria, three in New South Wales, four in Tasmania, two each in Queensland and South Australia, and one in Western Australia. A wide variety of paper and paper board is produced in Australian mills. The table below gives details of the production of some of the principal items.

PRODUCTION OF PAPER PRODUCTS: AUSTRALIA, 1965-66 TO 1967-68

	Quantity (tons)			*Value ($'000)*		
Type of paper	*1965–66*	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
Newsprint	93,211	97,255	92,648	12,106	13,365	12,688
Blotting	601	508	569	161	149	161
Duplicating	9,721	8,291	10,212	3,758	3,467	3,876
Printing and writing	120,540	114,992	112,780	35,818	35,704	35,952
Wrapping—						
Kraft	149,331	184,561	183,591	34,568	40,637	43,344
Other	11,114	13,942		3,850	4,960	
Paper felts	1,700	1,905	1,164	366	415	243
Paper boards	317,553	329,496	334,660	51,465	53,726	57,093

Overseas trade in forest products, timber and timber products

Imports

IMPORTS OF FOREST PRODUCTS, TIMBER AND TIMBER PRODUCTS AUSTRALIA, 1966-67 AND 1967-68

		Quantity		*Value ($'000 f.o.b.)*	
		1966–67	*1967–68*	*1966–67*	*1967–68*
Wood in the rough or roughly squared	'000 sup ft	44,763	53,166	2,896	3,695
Wood shaped or simply worked—					
Timber sawn lengthwise, sliced or peeled, but not further prepared, of a thickness exceeding 5 mm—					
Conifer—					
Douglas fir	,,	177,183	171,316	16,366	16,104
Hemlock and balsam	,,	15,395	11,200	1,003	865
Radiata pine	,,	26,531	25,016	2,004	1,868
Redwood and western cedar	,,	22,414	28,905	2,728	3,851
Non-conifer	,,	..	..	6,981	11,278
Tanning extracts of vegetable origin	cwt	79,601	74,005	550	504
Wood and cork manufactures (except furniture)—					
Veneers, plywood boards, 'improved' or reconstituted wood and other wood, worked, n.e.s.		..	..	6,355	7,777
Wood, worked, n.e.s.		..	..	2,725	3,722
Cork manufactures		..	..	1,187	1,431

Imports of coniferous timbers, shaped or simply worked, came mainly from Canada and the United States of America in 1967–68. Malaysia was the source of by far the greater proportion of non-coniferous timber imports. Papua and New Guinea and the United Kingdom supplied most of Australia's imports of veneers, while plywood imports came mainly from Japan and Papua and New Guinea.

Exports

EXPORTS OF AUSTRALIAN FOREST PRODUCTS, TIMBER AND TIMBER PRODUCTS(a) AUSTRALIA, 1966-67 AND 1967-68

		Quantity		*Value ($'000 f.o.b.)*	
		1966–67	*1967–68*	*1966–67*	*1967–68*
Wood in the rough or roughly squared		..	..	666	636
Wood, shaped or simply worked—					
Railway or tramway sleepers	'000 sup ft	26,023	5,621	3,280	863
Timber sawn lengthwise exceeding 5 mm—					
Conifer	,,	393	574	95	99
Non-conifer	,,	11,541	9,864	1,790	1,634
Timber, planed or tongued—					
Conifer	,,	830	808	233	228
Non-conifer	,,	468	588	114	146
Cork, raw and waste	cwt	131	..	13	..
Plants used in dying and tanning	,,	2,590	1,920	8	5
Natural gums, resins, etc.	,,	9,180	8,160	63	66
Eucalyptus oil	'000 lb	308	355	221	269
Veneer wood	'000 sq ft	3,207	3,584	133	151
Plywood, blockboards, etc.	,,	3,383	1,649	444	416
Improved wood		..	..	24	3
Reconstituted wood	'000 sq ft	1,153	1,106	151	147
Wooden beadings and mouldings		..	..	120	61
Wood simply shaped or worked, n.e.i.		..	..	33	8
Wood manufactures, n.e.i.		..	..	894	715
Cork manufactures		..	..	31	83

(a) Excludes re-exports.

Owing to the adoption of the new Australian Export Commodity Classification from July 1966 (*see* Year Book No. 54, page 339) completely comparable figures for years prior to 1966–67 are not available.

CHAPTER 24

FISHERIES

Further information on subjects dealt with in this chapter is contained in the annual printed bulletin *Non-Rural Primary Industries* and in the annual mimeographed statistical bulletin *Fisheries*, particularly as regards types of fish, etc. caught.

Fisheries resources and their commercial exploitation

Fish

It has been estimated that there are approximately 2,000 species of fish (including freshwater species) in Australia and the waters surrounding it. Fishing is carried out continually in estuarine, coastal and offshore Australian waters in the east and south from Port Douglas in Queensland to Ceduna in South Australia, and in Western Australia from Esperance to Exmouth Gulf, and more recently in the Onslow, Broome, Darwin, and Karumba areas in the north. Most fishing is done in waters over the continental shelf, which varies greatly in width around the continent, but tuna is sometimes fished beyond the shelf. As in other countries, fisheries in Australia may be divided into estuarine fisheries, located in the tidal waters of rivers and coastal lakes, beaches and bays; pelagic fisheries, which exploit species inhabiting the surface layers of the open ocean; and demersal fisheries, which fish the bottom layers of the sea. The estuarine fisheries produce considerable quantities of the table varieties, such as mullets (*Mugil cephalus* and associated species) and breams (*Acanthopagrus spp.*). In addition to these there is a small freshwater commercial fishery, principally in New South Wales and South Australia ,exploiting Murray cod (*Maccullochella macquariensis*), golden perch (*Plectroplites ambiguus*), The pelagic fisheries produce species exploited during their seasonal migration, such as Australian'salmon' (*Arripis trutta*), which is a member of the order Perciformes, or perch-like fishes, tunas (*Fam. Thunnidae*, *Katsuwonidae*, *Sardidae*), snoek (*Leionura atun*), garfish (*Hemirhamphidae*), and mackerels (*Cybium spp.*). These fisheries, with the exception of some tuna, mackerel and reef fisheries, are concentrated in the temperate waters around the southern half of the continent. The offshore demersal fisheries include those carried out on reefs which may be found virtually right around the continent, and which yield such species as snapper (*Chrysophrys auratus*), whiting (*Sillaginidae*), the so-called 'cods' (*Epinephelus*, *Choerodon*, *Callyodon spp.*) and associated species; the trawl fisheries which produce species such as flathead (*Neoplatycephalus*, *Trudis spp.*), morwong (*Nemadactylus spp.*), John Dory (*Zeus faber*), etc.; and the important fishery for school shark (*Galeorhinus australis*) and gummy shark (*Mustelus antarcticus*) in south-eastern Australia.

Crustaceans

Crustaceans taken in Australia include crayfish (i.e. rock lobster), prawns, crabs, and freshwater crayfish. Crayfish (southern, *Jasus lalandei;* western, *Panulirus cygnus;* and eastern, *Jasus verreauxi*) constitute the most important crustaceans exploited in Australia, and various species occur on the reefs of the continental shelf in all States. The commercial fishery has not extended to the tropical species (*P. ornatus*), etc., for technical reasons, but is concentrated on species found around the southern half of Australia. Prawns (*Penaeus* and *Metapenaeus spp.*) are taken in the estuarine coastal and offshore waters of New South Wales and Queensland, in the Shark Bay and Exmouth Gulf region of Western Australia, in restricted areas of South Australia, in the Gulf of Carpentaria, and in the waters of the Northern Territory. Crabs (*Scylla* and *Portunus spp.*) are taken mainly in Queensland and Western Australia, but small quantities are also taken in the other States. Freshwater crayfish (*Euastacus serratus*) are caught in inland streams in New South Wales, and one species, marron (*Cherax tenuimanus*) forms the basis of an amateur fishery in the south-west of Western Australia.

Molluscs

Edible molluscs produced in Australia include oysters (mainly *Crassostrea commercialis*), scallops, mussels, squid, octopus, cuttlefish, and abalone. Naturally-grown oysters are produced in all States. In New South Wales, and to a lesser extent in Queensland, edible oysters are cultured commercially. The scallops (*Pecten meridionalis* and *Equichlamys bifrons*) are taken in Tasmania, the saucer scallop

(*Amusium balloti*) is harvested in Queensland and there are prospects for the establishment of a scallop fishery in Western Australia, but the major fishery is that in Port Phillip Bay, which is based on *Pecten alba*. Mussels (*Mytilus planulatus*) are gathered mainly in Victoria. Small quantities of cephalopods, mainly squid (*Loligo spp.*), are produced in many localities. The fishery for abalone (mainly *Notohaliotis ruber*), which has developed very rapidly in recent years, now extends from southern New South Wales to South Australia, with Tasmania and Victoria providing the bulk of the catches.

Pearl-shell and trochus-shell

The shell of the Australian species of pearl oyster (*Pinctada maxima*) is taken in the tropical waters of Australia from Exmouth Gulf in Western Australia to Cairns in Queensland for the manufacture of buttons, knife handles, etc. Live pearl-shell is used for pearl culture, *Pinctada maxima* being capable of producing pearls which are the largest in the world and which command top market prices. Trochus-shell is found mainly on coral reefs off the Queensland coast, although small quantities occur in Western Australia.

Whales

The Australian whaling industry formerly exploited the baleen (humpback) whales during their winter migrations along the east and west coasts of Australia. However, owing to the total prohibition placed on their capture by the International Whaling Commission in 1963, Australian whaling is now confined to the sperm whale (*Physeter catodon*) which has been taken in the southern waters of Western Australia since 1955.

Marine flora

Seaweeds of possible commercial value occur in the coastal waters of New South Wales, Tasmania, South Australia, and Western Australia. At Triabunna, Tasmania, a factory is processing seaweed (*Macrocystis pyrifera*) for its alginate content.

History of the development of fisheries industries in Australia

Fishing

At the beginning of this century Australian fisheries were principally estuarine and onshore, and the deeper offshore resources were comparatively unknown. Vessels were generally sail-powered, and catching and preservation methods were primitive.

From 1909 to 1914 a Commonwealth vessel was engaged in research into fisheries resources around Australia. As a result of this exploration, otter trawling in the south-eastern waters began in 1915. There have been several years of high production from this fishery, but in each case the peak year was followed by a period of low production. Danish seine trawlers entered this fishery in 1936. In 1958–59 the steam otter trawlers used in this area were taken out of service. This fishery is at present stabilised at a relatively low level of production.

The tuna fishery began with the establishment in 1937 of a cannery at Narooma in New South Wales to exploit the occurrences, mainly of southern bluefin tuna (*Thunnus thynnus maccoyii*), which had been revealed by aerial surveys in 1936. However, landings were insignificant for over a decade. In 1950 the Commonwealth Government sponsored an American-owned clipper and trained crew to instruct fishermen in the pole-and-live-bait method of catching tuna. Development of the South Australian tuna fishery followed the visit of two American tuna experts in 1956. Attempts have been made to use gill netting, long lining, and the purse seine techniques, but these have not become established in the tuna fisheries.

Crustaceans

The crayfishery, which is undertaken off south-eastern Australia and off the west coast of Western Australia, was for many decades small. It was not until 1944 that the major sector, the western crayfishery, began to develop into what is now Australia's most productive single fishery. Between 1944 and 1947 production from the shallow areas of Houtman Abrolhos was used for canning for the armed forces. From 1948 to 1953 mechanisation of the fleet was introduced progressively and deeper waters were worked. The United States market for frozen craytails was established during this period. The period 1954 to 1962 saw the introduction of larger and more powerful vessels, of conservation measures designed to maximise the sustainable yield, and of increased processing facilities. The number of boats operating in this fishery is now carefully controlled. In the southern crayfishery development has followed similar lines, but production is lower because of the smaller crayfish population.

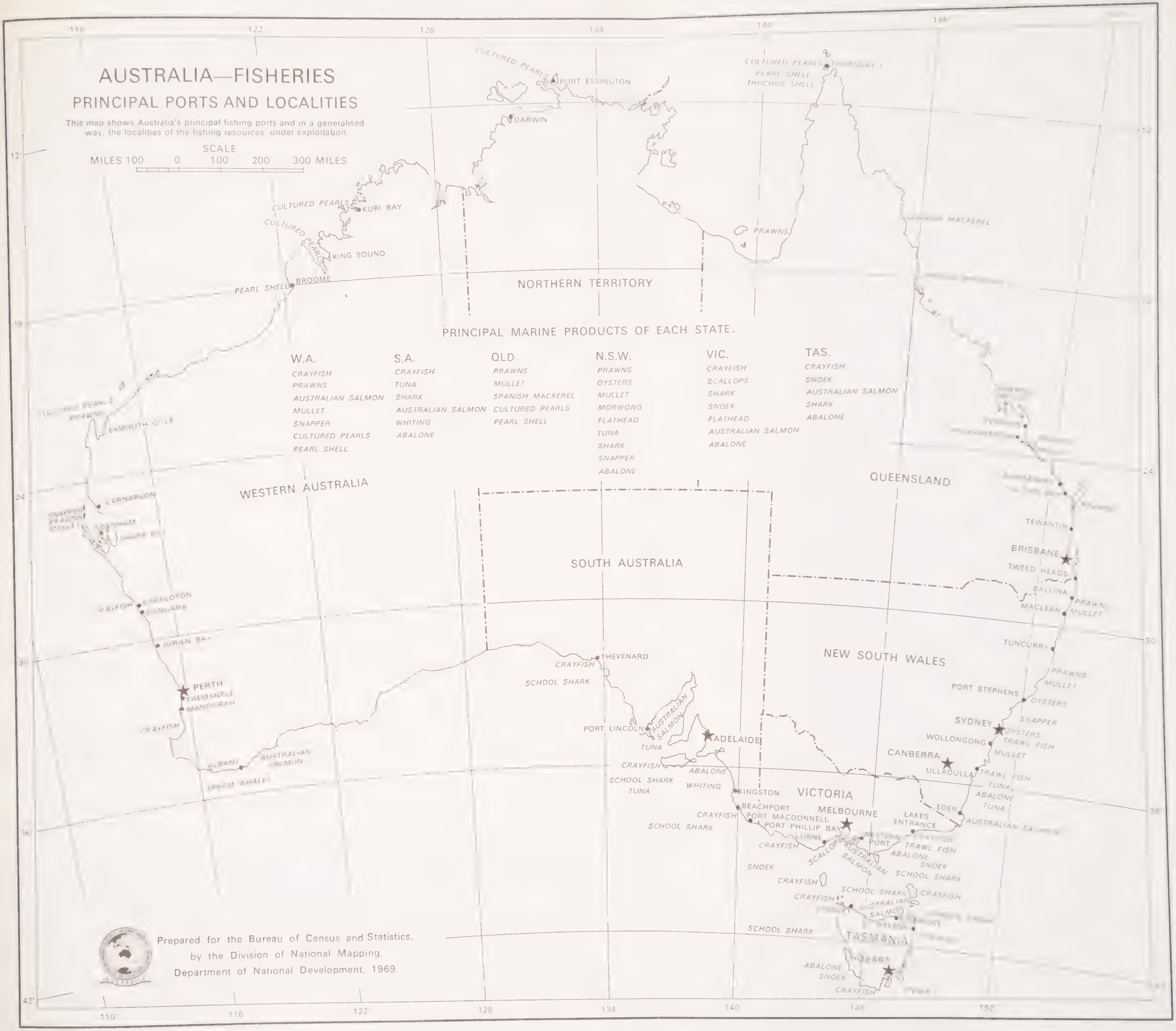

AUSTRALIA—FISHERIES
PRINCIPAL PORTS AND LOCALITIES
This map shows Australia's principal fishing ports and in a generalised way, the localities of the fishing resources under exploitation.
SCALE
MILES 100 0 100 200 300 MILES
PRINCIPAL MARINE PRODUCTS OF EACH STATE.
W.A.: CRAYFISH, PRAWNS, AUSTRALIAN SALMON, MULLET, SNAPPER, CULTURED PEARLS, PEARL SHELL
S.A.: CRAYFISH, TUNA, SHARK, AUSTRALIAN SALMON, WHITING, ABALONE
QLD.: PRAWNS, MULLET, SPANISH MACKEREL, CULTURED PEARLS, PEARL SHELL
N.S.W.: PRAWNS, OYSTERS, MULLET, MORWONG, FLATHEAD, TUNA, SHARK, SNAPPER, ABALONE
VIC.: CRAYFISH, SCALLOPS, SHARK, SNOEK, FLATHEAD, AUSTRALIAN SALMON, ABALONE
TAS.: CRAYFISH, SNOEK, AUSTRALIAN SALMON, SHARK, ABALONE
WESTERN AUSTRALIA
NORTHERN TERRITORY
SOUTH AUSTRALIA
QUEENSLAND
NEW SOUTH WALES
VICTORIA
TASMANIA
CULTURED PEARLS
PORT ESSINGTON
DARWIN
CULTURED PEARLS
THURSDAY I.
PEARL SHELL
TROCHUS SHELL
PRAWNS
SPANISH MACKEREL
CULTURED PEARLS
KURI BAY
CULTURED PEARLS
KING SOUND
PEARL SHELL
BROOME
EXMOUTH GULF
CARNARVON
DENHAM
SHARK BAY
GERALDTON
DONGARA
CRAYFISH
JURIEN BAY
PERTH
FREMANTLE
MANDURAH
CRAYFISH
ALBANY
AUSTRALIAN SALMON
SPERM WHALE
THEVENARD
CRAYFISH
SCHOOL SHARK
PORT LINCOLN
AUSTRALIAN SALMON
TUNA
ADELAIDE
CRAYFISH
ABALONE
SCHOOL SHARK
TUNA
WHITING
KINGSTON
BEACHPORT
PORT MACDONNELL
CRAYFISH
SCHOOL SHARK
MELBOURNE
PORT PHILLIP BAY
LORNE
CRAYFISH
SCALLOPS
AUSTRALIAN SALMON
SNOEK
WESTERN PORT
LAKES ENTRANCE
TRAWL FISH
ABALONE
SNOEK
SCHOOL SHARK
CRAYFISH
SCHOOL SHARK
CRAYFISH
CRAYFISH
AUSTRALIAN SALMON
SCHOOL SHARK
HOBART
ABALONE
SNOEK
CRAYFISH
TEWANTIN
BRISBANE
TWEED HEADS
BALLINA
PRAWNS
MACLEAN
MULLET
TUNCURRY
PRAWNS
MULLET
PORT STEPHENS
OYSTERS
SNAPPER
SYDNEY
OYSTERS
TRAWL FISH
WOLLONGONG
MULLET
CANBERRA
ULLADULLA
TRAWL FISH
TUNA
ABALONE
TUNA
EDEN
AUSTRALIAN SALMON
116
122
128
134
140
146
152
110
12°
18°
24°
30°
36°
42°
Prepared for the Bureau of Census and Statistics, by the Division of National Mapping, Department of National Development, 1969.

PLATE 48

The prawn fishery was pursued for many decades on a small scale, but it was not until the discovery that prawns spawn in oceanic waters that interest developed in catching them during this phase of their life cycle. The discovery in 1947 of stocks of prawns in Stockton Bight and off Evans Head (both in New South Wales) initiated the development of deep-sea prawning in Australia. Since that time the prawn fishery has expanded to the eastern offshore grounds. Commercial prawn fisheries in Western Australia commenced at Shark Bay in 1962 and at Exmouth Gulf in 1964. More recently grounds at Nickol Bay, Western Australia and further north have been exploited. The greatest development in the prawn fishery in recent years has occurred in the Gulf of Carpentaria. A joint Queensland-Commonwealth Government survey of a part of this area in 1963–1965 showed the presence of quantities of prawns, and commercial operators have now begun to exploit this resource on a large scale. The success of the ventures has encouraged the establishment of other ventures around northern Australia and substantial development of these fisheries is expected.

Molluscs

Natural oyster-beds were being harvested soon after the first settlement, but by 1870 rapid depletion of the stocks had resulted in restrictive legislation being passed in New South Wales. By the end of the nineteenth century, however, farms had been established in New South Wales and oyster cultivation was a notable industry. This cultivation has been almost entirely confined to the river estuaries of New South Wales. Very few oysters are exported and importation of oysters is necessary to cope with home demand. During 1964 an important scallop fishery was established in Port Phillip Bay, and a commercial fishery for abalone was developed in the waters of New South Wales, Tasmania, Victoria, and South Australia.

Whaling

Whaling has been undertaken from time to time in Australia since the early days of settlement. Baleen (humpback) whaling was carried out from stations on the west coast of Australia from 1949 and on the east coast from 1952. However, depleted stocks of the species resulted in the closing down of the eastern stations by 1962, and in 1963, following a severe decline in world stocks of humpback whales, the International Whaling Commission, of which Australia is a member, prohibited the capture of the species south of the equator for an indefinite period. Australian whaling is now carried out from Albany only, and the catch is confined to sperm whales.

Pearling

Since the middle of the nineteenth century, when pearling by Europeans first began in Australia, the collection of natural pearls has been incidental to the production of mother-of-pearl shell. Although attempts to establish pearl culture in Australia had been partially successful as early as the end of the last century, it was not until 1956 that the modern technique, as developed by the Japanese, was introduced into Australia at Kuri Bay in Western Australia. The joint venture between Australian and Japanese interests proved successful, and others entered the industry. There are now eighteen pearl culture farms in Western Australia, the Northern Territory, Queensland and Papua. Fifteen of the farms are operated as joint ventures by Australian and Japanese interests, while three are wholly Australian enterprises. The technique of pearl culture is still a closely-guarded trade secret.

General

A map showing Australia's principal ports and the localities of the fishery resources under exploitation appears on plate 48.

Fisheries administration and research

Government administration

The fisheries within territorial waters are administered by State departments and Territory administrations. The Fisheries Branch of the Department of Primary Industry develops and administers fisheries in extra-territorial waters and co-ordinates fisheries administration. In 1968 the Commonwealth Government established an exclusive fishing zone around Australia from three to twelve miles. This does not involve any change in territorial waters.

The fisheries laws of each State and Territory and of the Commonwealth provide for the licensing of boats used in commercial fishing operations and of commercial fishermen. The provisions are broadly similar in each State, the general requirement being that any person who takes fish for sale, and any boat used in such fishing operations, must be licensed in the State or Territory concerned. Some States extend the licensing requirements to amateur or part-time fishermen. Australian nationals who fish commercially outside the territorial waters of a State or Territory, but within Australian waters as proclaimed under the *Fisheries Act* 1952–1966, are required to take out licences and to register their boats under that Act.

Fish stocks inhabiting Australian waters are a common property resource. With the exception of the Western Australian and Tasmanian crayfisheries and the Shark Bay and Exmouth Gulf prawn fisheries, there are no restrictions on recruitment of men and vessels to any fishery. It has, therefore, been necessary for governmental action to be taken to control operations in certain fisheries which are sensitive to over-exploitation. The policy basic to the management of these fisheries is the greatest sustainable yield consistent with economic operations. Where a fishery, for economic reasons, is not producing its maximum yield, efforts to discover new methods of utilisation of the catch are made.

The *Continental Shelf* (*Living Natural Resources*) *Act* 1968 is expected to become operative during late 1969. The Act repeals the *Pearl Fisheries Act* 1952–1966 and provides for regulation of the exploitation of the living natural resources of the continental shelf. These resources comprise species proclaimed as being sedentary organisms to which the Act applies. The Convention on the Continental Shelf, Geneva, 1958, defines sedentary organisms as those which 'at the harvestable stage, either are immobile on or under the seabed or are unable to move except in constant physical contact with the seabed or the subsoil'. The Act requires boats and operators engaged in searching for and taking of sedentary organisms for commercial purposes on the continental shelf to be licensed and this applies 'to all persons, including foreigners, and to all ships including foreign ships'. It also provides for the protection of organisms for conservation purposes generally, i.e., for the regulation of certain kinds of non-commercial collection.

Under the *Whaling Act* 1960–1966 the Commonwealth controls whaling from Australian stations in accordance with conditions laid down by the International Whaling Commission. This Commission was established by the International Convention for the Regulation of Whaling, 1946, to organise world-wide conservation measures.

Research

The main aim of fisheries research in Australia is to achieve the greatest sustainable yield of fish and to assist in the development of an efficient industry. To this end much of the biological research already undertaken has been directed at formulating recommendations for management of various fisheries. Research work is also carried out which is expected to lead to the development of new fisheries, the expansion of under-exploited fisheries, more economical operations, and the use of more efficient equipment.

The organisations in Australia at present engaged in research into fisheries matters are:

(i) Division of Fisheries and Oceanography, C.S.I.R.O. (fisheries science and oceanography);
(ii) Division of Food Preservation, C.S.I.R.O. (research into handling, storage, processing, and transportation of fish);
(iii) the several State fisheries departments (general biological research);
(iv) Fisheries Branch, Department of Primary Industry (economic and management research, gear technology, extension work to the industry).

Collection and presentation of fisheries statistics

Source and basis of statistics

Statistics presented in this chapter have been collected by a number of authorities. The various State fisheries authorities have supplied, through the Deputy Commonwealth Statisticians in the States, the details of employment, boats, equipment, and production of the general fisheries and the pearl and shell fisheries. The Fisheries Branch of the Department of Primary Industry has supplied particulars of the whaling industry. Statistics of the processing of general fisheries products and of overseas trade in the products of fishing and whaling have been compiled in the Commonwealth Bureau of Census and Statistics.

The statistics refer, in general, to financial years. However, pearl and shell fishing data refer to the season ended in the financial year shown. Whaling statistics are shown by calendar years, and refer to the season in the calendar year. All overseas trade information refers to financial years.

In the preparation of Australian fisheries production statistics the quantities of individual products are generally in terms of the form in which they are taken from the water. For example, the statistics of fish production published in this chapter are in terms of 'estimated live weights' which are calculated from landed weights by using conversion factors for each species in each State. These conversion factors allow for the fact that the quantities of fish reported are frequently in a gutted, headed and gutted, or otherwise reduced condition. Crustaceans are reported on a 'whole weight' basis and molluscs (edible) on a 'gross (in-shell) weight' basis. The figures of pearl-shell and trochus-shell refer to the actual quantities of dry shell for sale and exclude the weight of the fish.

In Australia the basic source of statistical information on commercial fishing operations is the fishermen. In four of the six States monthly returns of catch by species have been obtained from fishermen for a number of years. In the other two States (Queensland and South Australia) there have been no statistical collections from fishermen, and catch statistics have been derived from other sources such as markets and receiving depots. In general it is recognised that catch statistics in Australia have been somewhat incomplete in past years. For example, details of production given in this chapter refer in most cases only to the recorded commercial production. In view of the importance of amateur fishermen in certain types of fishing, details shown cannot be taken as representing the total catch. In addition, it is likely that the figures shown understate the full commercial catch because no information is available on fish taken for sale by persons not licensed as professional fishermen.

Two weaknesses of fisheries statistical collections in Australia to date have been the lack of uniformity, which makes it difficult to compile statistics on an Australia-wide basis, and the lack of data on the effort involved in taking fish (time spent fishing, gear used, etc.). Recognising these weaknesses, the Commonwealth-States Fisheries Conference in 1960 appointed a Statistics Committee 'to examine all aspects of fisheries statistics and fully document a proposed system for submission to the States and Commonwealth for approval'.

Model system of catch and effort statistics, 1962

The model system of catch and effort statistics designed by the Committee was adopted by the Commonwealth-States Fisheries Conference in 1962. The new system was introduced in Tasmania in 1963 and in Victoria and Western Australia in 1964. The system was introduced in Queensland for the otter trawl fishery early in 1965, but there are no definite plans at present to extend it to other fisheries. The system is now being introduced into South Australia in respect of major fisheries, and arrangements are proceeding for its introduction into New South Wales.

Under the new system fishermen are asked to report monthly the various fishing methods used, catch of each species taken and the locality where the greatest proportion of the catch is taken. Fishermen record catch in terms of landed weight, and appropriate conversion factors are used to obtain live weight where this is required. A grid system of 1° rectangles (relating to latitude and longitude) is used for recording location of catches at sea, and estuaries and inland waters are recorded where appropriate. Other data obtained include details of fishing effort, ports at which catch is landed, and employment details.

The eventual implementation of this system in all States is expected to ensure the availability of statistical information of a much higher standard. In addition to the new system of catch and effort statistics, a uniform boat registration system has been introduced by all States. This new system will provide details of various characteristics of the commercial fishing fleet on a uniform basis for all States.

Boats and equipment used in fisheries

Fish, crustaceans and molluscs (edible)

The boats used for the estuarine fisheries are mostly small vessels, propelled by diesel or petrol engines of low power. The offshore vessels range in length from 30 feet to 120 feet and are almost invariably powered by diesel engines. Many of them have insulated holds to carry fish in ice, and some of the crayfish boats are fitted with wells in which the catch is kept alive. Some vessels have dry refrigeration and others, including some of the tuna live-bait pole-fishing vessels, are equipped with brine refrigeration.

A recent survey showed that about 50 per cent of Australia's commercial fishing fleet, including tenders, consists of vessels up to twenty feet in length, about 25 per cent are in the 20–29 feet category, and the remainder are greater in length. Only a very small number are greater than fifty feet in length. More precise information on this aspect of the fishing fleet will be available in the future when results from the uniform boat registration system become available. A great variety of fishing equipment is used, and the following are the types of equipment most commonly used for the main types of fish, crustaceans, and molluscs: mullet, beach seine, gill net; shark (edible), long-lines, gill net; Australian salmon, beach seine; snoek, trolling lines; flathead, Danish seine, otter trawl; snapper, long-lines, traps, gill net, hand-line; morwong, Danish seine, otter trawl, traps; whiting, handlines, Danish seine, beach seine; garfish, gill net, beach seine; mackerel, trolling lines; tuna, pole and live-bait, trolling lines (lampara nets and purse seines are used for taking live bait for tuna); prawns, otter trawl, beam trawl, seine net; crayfish, pots, traps; scallops, dredge, otter trawl.

Pearls, pearl-shell and trochus-shell, whaling

Ketch-rigged luggers about fifty-five feet long which carry crews of eight to fourteen members are used for pearl and pearl-fishing around Australia.

The whaling industry is highly mechanised. Standard equipment includes aircraft to locate whales, diesel-powered catchers of about 100 to 125 feet in length, and tow boats.

Boats and equipment employed by industry

The following two tables show details of boats and equipment employed in the taking of fish, crustaceans and edible molluscs, pearl-shell and trochus-shell, and the number of chasers and stations engaged in whaling operations. The reservations mentioned below regarding the use of employment information are also applicable to these tables. Boats employed in more than one industry are classified to their main activity.

FISHERIES: BOATS AND EQUIPMENT EMPLOYED AND WHALING STATIONS OPERATING, STATES AND NORTHERN TERRITORY, 1967–68

		N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*Aust.*
General fisheries—									
Boats employed . . .	no.	2,220	1,084	1,234	2,360	1,487	585	53	9,023
Value of boats and equipment	$'000	7,263	7,961	8,073	8,762	11,413	5,784	458	49,714
Edible oyster fisheries—									
Boats employed . . .	no.	1,505	. .	94	. .	. .	. .	. .	1,599
Value of boats and equipment	$'000	1,393	. .	52	. .	. .	. .	. .	1,444
Pearl-shell and trochus-shell(*a*)—									
Boats employed . . .	no.	. .	. .	31	. .	15	. .	3	49
Value of boats and equipment	$'000	. .	. .	n.a.	. .	n.a.	. .	n.a.	n.a.
Whaling(*a*)—									
Chasers	no.	. .	. .	. .	. .	3	. .	. .	3
Stations operating . .	,,	. .	. .	. .	. .	1	. .	. .	1

(*a*) *Source:* Department of Primary Industry.

FISHERIES: BOATS AND EQUIPMENT EMPLOYED AND WHALING STATIONS OPERATING, AUSTRALIA, 1963–64 TO 1967–68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
General fisheries—						
Boats employed	no.	8,473	9,426	8,983	8,991	9,023
Value of boats and equipment . .	$'000	31,794	36,401	40,602	46,102	49,714
Edible oyster fisheries—						
Boats employed	no.	1,424	1,419	1,415	1,549	1,599
Value of boats and equipment . .	$'000	976	1,125	1,161	1,127	1,444
Pearl-shell and trochus-shell(*a*)— . .						
Boats employed	no.	53	40	42	42	49
Value of boats and equipment . .	$'000	480	n.a.	n.a.	n.a.	n.a.
Whaling(*a*)—						
Chasers	no.	3	3	3	3	3
Stations operating	,,	1	1	1	1	1

(*a*) *Source:* Department of Primary Industry.

Employment in fisheries

Persons engaged in fishing activities, 1966 census

The number of persons whose industry statements were classified to 'fishing' at the 1966 census was 8,021 out of a total of 512,994 in all primary industries and 4,856,455 in the total work force. The census classification 'fishing' includes such activities as fishing, whaling, pearl-shell fishing, oyster-farming, etc. For further information *see* the chapter Employment and Unemployment, also 1966 Census Bulletin No. 9.6, *Population: By Industry and Occupational Status, Australia.*

Classification of registered commercial fishermen by industry

The following two tables are derived mainly from the licensing records of the various State fisheries authorities. Because the definitions and licensing procedures used by these authorities are not uniform the statistics should not be used to compare the relative productivities of fishing industries in the several States. Persons engaged in more than one industry are classified according to their main activity, and so may be classified differently from one year to the next.

REGISTERED COMMERCIAL FISHERMEN: STATES AND NORTHERN TERRITORY 1967–68

Industry	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*Aust.*
General fisheries	2,604	2,053	2,153	(*a*)2,400	2,724	1,118	123	13,175
Edible oyster fisheries	1,092	..	223	..	4	n.a.	..	1,319
Pearl-shell and trochus-shell(*b*)	..	..	371	..	131	..	36	538
Whaling(*b*)—								
At sea	..	..	..	..	45	..	..	45
Ashore	..	..	..	..	40	..	..	40

(*a*) Estimated. (*b*) *Source:* Department of Primary Industry.

REGISTERED COMMERCIAL FISHERMEN: AUSTRALIA, 1963–64 TO 1967–68

Industry	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
General fisheries	11,862	11,414	12,256	12,657	13,175
Edible oyster fisheries	1,467	997	1,072	1,249	1,319
Pearl-shell and trochus-shell(*a*)	640	533	544	571	538
Whaling(*a*)—					
At sea	42	45	44	45	45
Ashore	40	38	42	43	40

(*a*) *Source:* Department of Primary Industry.

Production, processing and domestic marketing of fisheries products

The tables on pages 981–3 show details of the production of the main types of fish, crustaceans , and molluscs caught in each State and the Northern Territory in 1967–68 and throughout Australia for the years 1963–64 to 1967–68.

Fish

FISH: PRODUCTION, BY TYPE, STATES AND NORTHERN TERRITORY, 1967-68
('000 lb estimated live weight)

Type	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*Aust.*
Marine types—								
Australian salmon	715	1,303	..	2,382	10,502	606	..	15,508
Tuna	(*a*)8,096	34	85	6,560	144	54	..	14,974
Shark	1,964	5,810	..	3,266	710	1,600	21	13,371
Mullet	5,606	536	3,645	527	1,384	20	1	11,719
Snoek	50	3,676	..	..	..	5,984	..	9,710
Flathead	3,491	1,568	193	..	18	101	..	5,370
Whiting	267	462	625	1,809	516	..	..	3,679
Snapper	1,635	374	124	855	559	..	..	3,548
Morwong	2,792	167	..	..	..	14	2	2,975
Mackerel	129	..	1,860	..	201	7	25	2,221
Bream (including Tarwhine)	710	726	456	94	73	..	6	2,065
Garfish	268	371	145	809	39	25	..	1,658
Luderick	1,200	83	203	..	..	..	..	1,486
Tailor	322	147	814	..	79	..	..	1,362
Ruff	..	44	..	524	745	..	..	1,313
Leatherjacket	795	35	..	..	24	..	..	854
Other	4,707	1,256	2,284	1,266	1,752	210	552	12,028
Total, marine	*32,745*	*16,593*	*10,435*	*18,092*	*16,747*	*8,623*	*607*	*103,841*
Freshwater types	260	423	n.a.	193	..	206	..	(*b*)1,082
Grand total	**33,005**	**17,016**	**10,435**	**18,285**	**16,747**	**8,829**	**607**	**104,923**

(*a*) Source: C.S.I.R.O. (*b*) Excludes freshwater fish caught in Queensland, particulars of which are not available.

FISH: PRODUCTION, BY TYPE, AUSTRALIA, 1963-64 TO 1967-68

('000 lb estimated live weight)

Type	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Marine types—					
Australian salmon	11,260	8,291	11,184	14,898	15,508
Tuna	17,932	15,838	18,595	12,455	(*a*)14,974
Shark	10,463	10,470	11,597	13,326	13,371
Mullet	12,496	12,146	14,152	12,461	11,719
Snoek	4,331	6,514	8,539	5,146	9,710
Flathead	6,151	6,836	5,824	5,848	5,370
Whiting	3,498	3,658	3,600	3,619	3,679
Snapper	4,160	3,877	3,344	3,668	3,548
Morwong	4,545	3,218	3,021	3,772	2,975
Mackerel	2,215	2,316	2,298	2,153	2,221
Bream (including Tarwhine)	1,233	1,293	1,508	1,692	2,065
Garfish	1,740	1,422	1,471	1,780	1,658
Luderick	1,293	1,356	1,698	1,455	1,486
Tailor	1,627	1,748	1,357	799	1,362
Ruff	1,093	1,507	1,442	1,636	1,313
Leatherjacket	1,125	1,343	1,494	986	854
Other	10,907	11,401	11,792	11,666	12,028
Total, marine	*96,067*	*93,234*	*102,916*	*97,360*	*103,841*
Freshwater types(*b*)	1,015	1,183	1,060	1,184	1,082
Grand total	**97,082**	**94,417**	**103,976**	**98,544**	**104,923**

(*a*) *See* footnote (*a*) previous table. (*b*) Excludes freshwater fish caught in Queensland, particulars of which are not available.

Crustaceans

CRUSTACEANS: PRODUCTION, BY TYPE, STATES AND NORTHERN TERRITORY, 1967-68

('000 lb gross weight)

Type	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*Aust.*
Crayfish(*a*)	368	1,533	56	5,264	22,024	4,031	..	33,276
Prawns	5,343	5	10,572	295	3,862	..	23	20,101
Crabs	166	..	565	10	68	..	..	809
Total	**5,877**	**1,538**	**11,193**	**5,569**	**25,955**	**4,031**	**23**	**54,186**

(*a*) Includes freshwater crayfish caught in New South Wales and shovelnosed lobster taken in Queensland.

CRUSTACEANS: PRODUCTION, BY TYPE, AUSTRALIA, 1963-64 TO 1967-68

('000 lb gross weight)

Type	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Crayfish(*a*)	27,633	26,386	29,908	31,639	33,276
Prawns	13,369	12,076	12,547	13,624	20,101
Crabs	708	832	815	966	809
Total	**41,711**	**39,293**	**43,270**	**46,228**	**54,186**

(*a*) Includes freshwater crayfish caught in New South Wales and shovelnosed lobster taken in Queensland.

Molluscs (edible)

MOLLUSCS: PRODUCTION, BY TYPE, STATES, 1967-68
('000 lb gross [in-shell] weight)

Type	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*Aust.*
Scallops	..	29,150	311	..	273	496	..	30,230
Oysters	15,832	8	793	2	(*a*)	(*a*)	2	16,636
Abalone	(*b*)1,200	7,310	..	4,051	9	6,142	..	18,712
Squid	..	253	82	(*c*)35	7	..	..	377
Mussels	..	246	..	..	(*a*)	..	..	246
Octopus	..	15	..	(*d*)	2	..	..	18
Cuttlefish	..	..	..	(*d*)	..	..	..	1
Total	**17,032**	**36,983**	**1,185**	**4,088**	**293**	**6,639**	**2**	**66,221**

(*a*) Not available for publication; excluded from Australian total. (*b*) Estimated. (*c*) Includes cuttlefish and octopus. (*d*) Production for South Australia is included with squid.

MOLLUSCS: PRODUCTION, BY TYPE, AUSTRALIA, 1963-64 TO 1967-68
('000 lb gross [in-shell] weight)

Type	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Scallops	(*a*)15,373	(*a*)24,739	(*a*)29,524	(*a*)29,923	30,230
Oysters	12,775	14,636	15,067	16,115	(*b*)16,636
Abalone	192	966	2,975	10,825	18,712
Squid	303	217	233	(*c*)369	(*d*)377
Mussels	410	334	425	(*a*)260	(*a*)246
Octopus	16	13	34	(*e*)34	(*f*)18
Cuttlefish	2	1	3	(*f*)	(*f*)1
Total(*g*)	**29,073**	**40,907**	**48,262**	**57,527**	**66,221**

(*a*) Excludes particulars for Western Australia which are not available for publication. (*b*) Excludes particulars for Western Australia and Tasmania which are not available for publication. (*c*) Includes octopus for Queensland and cuttlefish and octopus for South Australia. (*d*) Includes cuttlefish and octopus for South Australia. (*e*) Excludes production for Queensland and South Australia, which is included with squid. (*f*) Production for South Australia is included with squid. (*g*) Incomplete, *see* relevant footnotes.

Pearls, pearl-shell and trochus-shell

PEARL CULTURE OPERATIONS: AUSTRALIA, 1963 TO 1967
(*Source:* Fisheries Branch, Department of Primary Industry)

		1963	*1964*	*1965*	*1966*	*1967*
Purchases of shell	no. of shells	503,100	590,729	635,003	697,433	783,733
	tons	241.0	288.3	311.6	345.5	427.6
Production of—						
Cultured pearls—						
Round and baroque pearls	no.	30,512	58,839	65,735	105,121	56,653
	momme(*a*)	18,279	35,892	40,098	63,073	30,061
	$'000	420	2,102	1,760	2,975	1,539
Half pearls	no.	147,764	232,887	278,637	264,012	266,466
	$'000	272	764	883	621	680
Manufacturing shell	tons	61.4	107.9	155.4	160.1	168.2
	$'000	11	38	67	70	80

(*a*) A momme is a pearl weight measurement equivalent to 0.13 oz (avoirdupois).

PEARL-SHELL AND TROCHUS-SHELL: PRODUCTION STATES AND NORTHERN TERRITORY, 1963 TO 1967

(Tons)

	1963	*1964*	*1965*	*1966*	*1967*
Pearl-shell(*a*)—					
Queensland	221.5	215.4	193.3	179.6	189.2
Western Australia	217.8	79.9	97.4	103.2	132.7
Northern Territory	4.9	5.4	8.9	16.6	4.8
Australia	*444.2*	*300.7*	*299.6*	*299.4*	*326.7*
Trochus-shell—					
Queensland	63.6	30.6	10.8	2.6	1.0

(*a*) Excludes manufacturing shell produced from pearl culture operations.

Whales

Sperm whales only have been taken since 1963, which was the last season during which baleen whales were also taken.

WHALES TAKEN(*a*): AUSTRALIA, 1964 TO 1968

(*Source:* Fisheries Branch, Department of Primary Industry)

(Number)

	1964	*1965*	*1966*	*1967*	*1968*
Male	695	636	595	560	585
Female	15	32	11	27	73
Total	**710**	**668**	**606**	**587**	**658**

(*a*) Sperm whales only.

Processing of fish

Quick-freezing is used at sea and ashore to preserve fish before delivery to consumers. The main technique employed in Australia is brine-freezing, as used extensively in the tuna and salmon fisheries.

Fish canning in Australia on a modern scale dates from 1937, before which fish canning was carried out on an occasional basis only by factories handling other foodstuffs. The main canneries handle tuna (Eden, New South Wales; Melbourne, Victoria; Port Lincoln, South Australia); Australian salmon (Eden, New South Wales; Melbourne, Victoria; Port Lincoln and Adelaide, South Australia; Albany, Western Australia; Margate, Tasmania); snoek (Melbourne, Victoria; Margate, Tasmania); scallops and abalone (Melbourne, Victoria).

Other methods of fish processing include smoking and bottling, but these are undertaken on a minor scale only. Among the few fish by-products produced are small quantities of fish meal.

FISH PROCESSING (EXCEPT FREEZING): AUSTRALIA, 1963-64 TO 1967-68

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Fish used(*a*)—	'000 lb	'000 lb	'000 lb	'000 lb	'000 lb
Whole	17,506	16,464	17,030	18,782	24,143
Headed and or gutted	5,148	5,491	5,866	6,872	7,769
Estimated live weight equivalent, fish used	*23,600*	*22,900*	*23,900*	*26,700*	*33,200*
Production(*b*)—					
Canned fish(*c*)—					
Australian salmon	5,335	3,875	4,664	6,344	6,737
Tuna	4,647	5,482	4,839	5,639	8,191
Other	1,167	1,557	2,350	1,759	2,450
Total, canned fish	*11,149*	*10,914*	*11,853*	*13,742*	*17,377*
Smoked fish	274	222	258	241	196
Fish paste	1,212	944	1,018	1,146	1,334
Fish meal(*d*)	2,222	2,373	1,778	1,813	2,776

(*a*) Fish used for canning (including fish loaf), smoking and the manufacture of fish paste, but excluding the weight of oysters, other shellfish and crustaceans used for canning. (*b*) Excludes canned crayfish, lobsters, prawns, oysters, and clams, details of which are not available for publication. (*c*) Includes fish loaf, fish cakes, etc. (*d*) Excludes whale meat.

Processed crustaceans and molluscs

The chief technique employed to preserve crayfish and scallops is blast freezing, although plate contact freezing is also being used. Crayfish for the domestic market are usually cooked whole and then frozen, as are some exported crayfish. However, the bulk of crayfish exports consists of frozen raw craytails. Most prawns for domestic consumption are sold in a whole cooked condition. Some are also exported in this form, after freezing. As a rule, however, the majority of prawn exports consist of green headless prawns, sometimes de-veined, sometimes split in 'butterfly' style, but in all cases frozen into five pound blocks. Scallops are normally frozen in cello-wrapped five pound blocks, although packaging of individually frozen scallops is growing in popularity. Small quantities of frozen abalone are now being exported to the United States of America and Asia. Canned abalone is also packed for the Asian market, and small quantities of abalone soup are being prepared for the domestic and overseas markets.

Whale processing

Oil from sperm whales is used in the manufacture of soap, plastics and watch lubricants, and in automatic transmission systems in motor cars.

WHALE PROCESSING: AUSTRALIA, 1964 TO 1968

(*Source:* Fisheries Branch, Department of Primary Industry)

		1964	*1965*	*1966*	*1967*	*1968*
Quantity of sperm whale oil produced	barrels(*a*)	27,534	25,002	24,252	22,428	23,472
Value of whale oil produced . .	$'000	620	510	540	423	435
Value of by-products (meal, meat, solubles, etc.)	,,	120	244	398	282	313
Total value of products	,,	*740*	*754*	*938*	*705*	*748*

(*a*) 6 barrels = 1 ton.

Domestic marketing of fisheries products

Although virtually the whole of the tuna and Australian salmon catches and a large proportion of the snoek catch are canned, the greater part of Australian fisheries production is marketed fresh or frozen.

Marketing arrangements for fresh fish vary. In New South Wales fish marketing is the responsibility of the New South Wales Fish Authority, which operates the Metropolitan and Wollongong Fish Markets. In other coastal centres of New South Wales fishermen's co-operatives may become registered as local fish markets. Fish for industrial use do not pass through any of these markets. The Queensland Fish Board sells all production on behalf of fishermen in that State, and has branches in eighteen centres, as well as depots at eight others. The Board also purchases fish on its own account to stabilise prices. In Victoria, Western Australia and Tasmania the marketing of fish is undertaken through agents. In South Australia the great majority of the fishermen are members of the South Australian Fishermen's Co-operative Ltd, which handles the whole of their production. Canned fish and frozen fish in the form of consumer packs are marketed mainly by the supermarket-type retail establishments. Oysters are usually sold live in the shell directly to restaurants, or are shelled and bottled before being sent to retailers.

Value of fisheries production

The following tables show details of the values of production of edible fisheries products, pearl-shell and trochus-shell for the years 1963–64 to 1967–68. *See also* the chapter Miscellaneous for an explanation of the value terms used.

SELECTED FISHERIES PRODUCTS: GROSS VALUE, STATES AND NORTHERN TERRITORY
1967-68
($'000)

Product	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*Aust.*
Fish . . .	5,434	2,253	(*a*)1,847	2,884	1,100	722	92	14,333
Crustaceans . .	3,003	1,030	3,973	3,518	18,441	2,898	14	32,877
Molluscs (edible) .	3,591	2,618	136	590	(*b*)13	1,087	. .	8,036
Pearl-shell(*c*) . .	. .	. .	99	. .	(*d*)91	. .	(*d*)1	(*e*)271

(*a*) Excludes freshwater fish, particulars of which are not available. (*b*) Excludes scallops, particulars of which are not available for publication. (*c*) *Source*: Department of Primary Industry. (*d*) Estimated. (*e*) Includes manufacturing shell produced from pearl culture operations; details classified by States are not available for publication.

SELECTED FISHERIES PRODUCTS: GROSS VALUE, AUSTRALIA, 1963-64 TO 1967-68
($'000)

Product	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Fish(*a*)	13,660	12,187	13,730	12,646	14,333
Crustaceans	15,629	22,386	24,008	24,906	32,877
Molluscs (edible)	(*b*)3,351	(*b*)3,804	(*b*)4,159	(*b*)6,580	8,036
Pearl-shell(*c*)	352	271	291	307	271
Trochus-shell(*c*)	10	5	2	. .	. .

(*a*) Excludes freshwater fish caught in Queensland. (*b*) Excludes scallops in Western Australia. (*c*) *Source*: Department of Primary Industry.

GROSS VALUE OF FISH, BY PRINCIPAL TYPES, 1967–68(*a*)
($'000)

Type of Fish	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*Aust.*
Australian salmon .	(*b*)	169	. .	214	397	49	. .	(*b*)
Tuna		5	4	590	14	5	. .	
Shark		780	. .	370	105	215	2	
Mullet		59	311	53	117	2	. .	
Snoek		357	. .	. .	. .	286	. .	
Flathead . . .		219	23	. .	2	10	. .	
Snapper . . .		109	32	187	74	. .	. .	
Morwong . . .		23	. .	. .	1	2	. .	
All other species . .		530	(*c*)1,478	1,470	391	153	89	
Total fish .	**5,434**	**2,253**	**1,847**	**2,884**	**1,100**	**722**	**92**	**14,333**

(*a*) A breakdown of value according to species is not available for previous years. (*b*) Details of individual species not available. (*c*) Excludes freshwater fish, particulars of which are not available.

FISHERIES: GROSS AND LOCAL VALUE OF PRODUCTION STATES AND NORTHERN TERRITORY, 1967-68
($'000)

State or Territory	*Gross value*	*Marketing costs*	*Local value*
New South Wales	12,028	1,817	10,212
Victoria	5,902	579	5,322
Queensland	7,309	412	6,896
South Australia	6,993	830	6,162
Western Australia	21,910	148	21,762
Tasmania	4,707	860	3,847
Northern Territory	107	n.a.	107
Australia	**58,956**	**4,646**	**54,308**

In the following table the local value of fishing and whaling production and the local value per head of population are shown by States. Because the value of materials used in the course of production is not available for all States it is not possible to show a comparison of net values.

FISHERIES: LOCAL VALUE OF PRODUCTION, STATES, 1963-64 TO 1967-68

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*Aust.*
LOCAL VALUE ($'000)								
1963–64	7,856	(*a*) 4,202	4,324	3,436	(*a*) 10,088	1,726	52	31,684
1964–65	8,263	3,212	5,298	4,480	15,167	2,194	71	38,685
1965–66	8,555	3,797	5,588	5,294	15,683	2,747	61	41,725
1966–67	8,836	4,307	6,130	5,420	16,468	3,024	82	44,267
1967–68	10,212	5,322	6,896	6,162	21,762	3,847	107	54,308
LOCAL VALUE PER HEAD OF POPULATION ($)								
1963–64	1.93	(*a*) 1.37	2.71	3.36	(*a*) 12.63	4.76	1.04	2.86
1964–65	1.99	1.02	3.26	4.26	18.56	5.99	1.34	3.43
1965–66	2.03	1.19	3.37	4.89	18.73	7.43	1.10	3.63
1966–67	2.07	1.33	3.81	4.91	19.10	8.09	1.41	3.81
1967–68	2.35	1.61	4.01	5.51	24.38	10.14	1.76	4.55

(*a*) Not comparable with subsequent years because of changes in methods of valuation.

Consumption of edible fisheries products

Particulars of the estimated supplies of fish, crustaceans and molluscs available for consumption per head of population, in terms of edible weight, are included in the table below. For the purpose of compiling this table, an allowance has been made for the non-commercial fish catch.

FISHERIES PRODUCTS: ESTIMATED SUPPLIES AVAILABLE FOR CONSUMPTION AUSTRALIA, 1963-64 TO 1967-68

(lb edible weight per head per annum)

	1963–64	1964–65	1965–66	1966–67	1967–68
Fresh or frozen—					
Fish—					
Australian origin(*a*)	3.3	3.2	3.3	3.1	3.0
Imported	3.1	3.0	3.8	3.3	3.5
Crustaceans and molluscs	1.2	1.5	1.5	1.8	2.1
Cured (including smoked and salted)	1.0	0.7	0.9	0.6	0.7
Canned—					
Australian origin	0.8	1.0	1.1	0.9	0.7
Imported	2.3	2.3	2.4	2.4	2.2
Total	**11.7**	**11.7**	**13.0**	**12.1**	**12.1**

(*a*) Includes an allowance for non-commercial catch of fish; excludes fish exported.

Overseas trade in fisheries products

Edible fisheries products

OVERSEAS TRADE IN EDIBLE FISHERIES PRODUCTS: AUSTRALIA 1965-66 TO 1967-68

	Quantity ('000 lb)			*Value ($'000 f.o.b.)*		
	1965–66	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
IMPORTS						
Fresh and frozen(*a*)	50,666	45,597	46,886	13,972	12,456	10,741
Smoked, dried and salted	10,516	7,393	8,975	2,551	1,568	2,018
Potted and concentrated	194	323	153	206	198	160
Canned—						
Herrings	6,528	5,844	4,676	1,384	1,281	1,095
Salmon	11,145	12,785	11,226	6,522	7,705	6,681
Sardines and pilchards	6,759	5,318	6,260	2,228	1,919	2,306
Tuna	216	148	258	65	51	93
Other fish	1,973	2,870	2,241	579	747	749
Crustaceans and molluscs	1,527	1,432	2,085	1,096	1,071	1,764
Total, canned	*28,148*	*28,397*	*26,746*	*11,874*	*12,774*	*12,688*
Products not elsewhere included	1,599	2,542	2,634	811	1,693	1,725
Grand total	..	..	..	**29,414**	**28,689**	**27,332**
EXPORTS (Australian produce only; excludes re-exports)						
Fresh and frozen(*b*)—						
Fish	4,857	988	296	782	211	116
Crustaceans and molluscs—						
Crayfish tails	9,735	10,266	11,016	18,079	17,172	22,540
Prawns	1,822	2,078	3,290	1,616	2,192	3,476
Other	2,618	3,456	5,648	1,367	1,999	3,740
Boiled and frozen crustaceans and molluscs	2,194	1,727	1,136	1,964	1,536	1,111
Prepared and preserved—						
Fish	277	545	384	97	205	146
Crustaceans and molluscs	884	2,435	4,259	458	1,392	2,376
Products not elsewhere included	70	155	163	43	141	245
Grand total	..	..	..	**24,406**	**24,848**	**33,750**

(*a*) Excludes frozen smoked, which is included in item Smoked, dried etc. (*b*) Excludes frozen smoked, which is included in item Products not elsewhere included.

Pearls

Pearls valued at $451,000 were imported into Australia in 1967–68 ($405,000 from Japan), compared with imports valued at $583,000 in 1966–67 ($554,000 from Japan).

Cultured pearls exported from Australia in 1967–68 (excluding re-exports) were valued at $1,532,000 compared with exports valued at $1,888,000 in 1966–67, the bulk of the exports each year being shipped to Japan. The value of natural pearls exported from Australia in 1967–68 (excluding re-exports) was $12,000 compared with $19,000 in 1966–67, the major proportion again being shipped to Japan.

Pearl, etc., shell and marine animal oils

Of the pearl-shell exported in 1967–68, exports valued at $129,000 were consigned to the United States of America, $128,000 to Japan and $66,000 to the Federal Republic of Germany.

OVERSEAS TRADE IN SHELLS: AUSTRALIA, 1965-66 TO 1967-68

	Quantity ('000 lb)			*Value ($'000 f.o.b.)*		
	1965–66	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
Imports—						
Total imports	*88*	*68*	*92*	*31*	*32*	*38*
Exports(*a*)—						
Pearl-shell	1,141	1,326	1,204	427	540	381
Trochus-shell	24	84	79	2	32	15
Other	18			8		
Total exports	*1,183*	*1,411*	*1,283*	*437*	*572*	*396*

(*a*) Australian produce only; excludes re-exports.

Of the whale oil exported in 1966–67, about one-half was exported to the United Kingdom, the United States of America, the Federal Republic of Germany, and the Netherlands sharing the bulk of the remainder.

OVERSEAS TRADE IN MARINE ANIMAL OILS: AUSTRALIA, 1965-66 TO 1967-68

	Quantity ('000 gal)			*Value ($'000 f.o.b.)*		
	1965–66	*1966–67*	*1967–68*	*1965–66*	*1966–67*	*1967–68*
Imports—						
Whale oil from—						
Norway	98	..	607	91	..	433
Japan	1,095	727	261	1,084	714	170
United Kingdom	54	104	61	84	135	73
Other countries	34	18	30	39	17	27
Total whale oil	1,281	849	959	1,298	866	702
Cod liver oil	108	93	94	97	84	81
Unrefined fish oils	82	61	73	76	54	54
Other	21	15	17	28	22	20
Total imports	*1,492*	*1,010*	*1,143*	*1,499*	*1,026*	*857*
Exports(*a*)—						
Whale oil	1,288	932	1,532	620	466	640
Other	2	2	1	1	3	1
Total exports	*1,290*	*934*	*1,533*	*621*	*469*	*641*

(*a*) Australian produce only; excludes re-exports.

CHAPTER 25

MINERAL INDUSTRY

Further detailed statistics and information on the subjects dealt with in this chapter are contained in the annual printed bulletins *Non-Rural Primary Industries* issued by this Bureau and in *The Australian Mineral Industry—Annual Review* and other publications issued by the Bureau of Mineral Resources, Geology and Geophysics, which also issues, in conjunction with this Bureau, a quarterly publication, *The Australian Mineral Industry*, comprising two parts—Part 1—Quarterly Review and Part 2—Quarterly Statistics. The annual mimeographed statistical bulletins *Mining and Quarrying*, *Minerals and Mineral Products*, *Mineral Exploration*, and *Overseas Participation in Australian Mining Industry* of this Bureau contain economic statistics of the industry prepared and published as soon as possible after the data have been compiled. A monthly statistical bulletin *Minerals and Mineral Products* is issued also, and other current statistics on mining or mine products are contained in the *Quarterly Summary of Australian Statistics*, the *Monthly Review of Business Statistics*, the *Digest o Current Economic Statistics*, and the *Monthly Bulletin of Production Statistics.*

GENERAL

Geology

General geology

The greatest part of the area of outcropping rock on the Australian continent is Precambrian in age. These basement rocks form the western and central core of the continent and are flanked by younger Palaeozoic rocks, which, along the eastern edge of the continent, form a belt several hundred miles wide extending from north Queensland to Tasmania. Mesozoic sediments overlie large areas of the continent and reach their greatest development in central Queensland. Cainozoic rocks occur mainly in the southern parts of Victoria and South Australia and as residual basalt cappings over an extensive area of the Palaeozoic rocks of eastern Australia.

Economic geology

Minerals of economic significance occur widely throughout the Precambrian and Palaeozoic rocks of the continent. Palaeozoic mineralisation is perhaps more varied, but the Palaeozoic deposits now being worked are in general smaller than those found in Precambrian rocks. Most of Australia's metallic mineral deposits occur within two broad regions, a region of Precambrian rocks in the west and central areas of the continent and a region of younger Palaeozoic rocks in the east. This situation is especially true in the case of the larger base metal deposits and also for smaller deposits of metallic minerals.

The major deposits of metallic minerals, including iron ore, lead, zinc, silver, copper, uranium, nickel, and gold, are contained in the Precambrian rocks of the Australian shield. Smaller deposits of tin, tungsten, tantalum, mica, beryllium, manganese, and cobalt are also contained in these rocks.

The mineralised Palaeozoic rocks contain major deposits of gold, now mostly worked out, and a few large copper and lead-zinc-silver occurrences. Smaller amounts of tin, tungsten, molybdenum, bismuth, and other metals also occur in these rocks.

Outside these two main categories, however, there are some metallic mineral deposits of considerable economic importance which were formed during the Tertiary Period. These include bauxite which occurs as a surface capping over various rocks, mostly of Mesozoic age. Extensive deposits of bauxite occur at Weipa on Cape York peninsula in north Queensland, at Gove on the north-eastern tip of the Northern Territory, in the Darling Range in Western Australia, and near Kalumburu in the north-west of Western Australia. These deposits are the result of a long period of weathering.

Mineral sands, another important exception, contain rutile, zircon, ilmenite, monazite, and other minerals, and are particularly well developed on the central and northern New South Wales coast, southern Queensland and south-western Western Australia. The deposits of the eastern States are considered to be derivatives of Mesozoic rocks. The Western Australian deposits are thought to be derivatives of the Precambrian granites of the Australian shield.

Occurrences of fuel minerals (coal, oil and natural gas) are characteristically located in former sedimentary basins. Large areas of Australia are covered by these basins, and more than twenty major sedimentary basins have been identified on the Australian mainland. In addition, sedimentary basins are known to exist in off-shore areas adjacent to the Australian coast. The individual basins range in area from 4,000 to 680,000 square miles and contain marine and continental sedimentary rocks ranging in maximum thickness from 1,000 to about 30,000 feet and including rocks of all ages from Proterozoic to Tertiary.

Deposits of black coal in Australia are mainly of Permian age and are located in sedimentary basins in the coastal areas of the eastern States. The majority of the New South Wales and Queensland black coal deposits are bituminous in type. The extensive brown coal deposits of Victoria were formed during the Tertiary Period.

Crude oil and natural gas have been found in a number of sedimentary basins. In the Bowen-Surat Basin, Queensland, commercial deposits of oil exist at the Moonie and Alton fields, and commercial deposits of natural gas exist in numerous prospects in the Roma and Rolleston areas. In the Adavale basin, Gilmore is a proven gas field. In general the oil reservoir rocks in Queensland are of Lower Jurassic age, and the gas reservoir rocks are of Mesozoic and Permian age. In the Gippsland Basin, off-shore Victoria in the Bass Strait, oil in considerable quantities was discovered in the Kingfish and Halibut fields, and oil and natural gas in the Marlin and Barracouta fields. In the same basin, deposits of hydrocarbons, the magnitude of which has yet to be evaluated, were encountered in the Flounder, Tuna, Snapper and Bream prospects. In the Gippsland Basin, the Cretaceous and Tertiary strata are the reservoir rocks. In the Cooper Basin, South Australia, commercial deposits of natural gas were discovered at Gidgealpa and Moomba, and also at Daralingie and Toolachee. The reservoir rocks are of Permian age. In the Carnarvon Basin, Western Australia, commercial crude oil mainly in the Cretaceous formations, and also to a lesser degree in the Jurassic, was discovered at Barrow Island. Further south, in the Perth Basin, natural gas in commercially significant quantities was discovered in the Yardarino, Gingin, Dongara, Mondarra and Whicher Range prospects, the reservoir rock being of Lower Permian age. In the Amadeus Basin, Northern Territory, natural gas was discovered in commercial quantities in formations of Ordovician age at Mereenie and Palm Valley.

Of the non-metallic minerals, many, such as clay, sand and silica, etc., are not restricted to the rocks of any particular era and are often polycyclic in nature. However, Precambrian rocks do contain deposits of blue asbestos in Western Australia, limestone and dolomite in South Australia, and mica in the Northern Territory.

Opals are found in the flat-lying sedimentary beds of the Great Artesian Basin in Queensland, New South Wales and South Australia. These opal deposits were formed during the Tertiary Period.

A table showing most of the larger mineral deposits now being mined in Australia according to the age of the geological formation in which they are found is shown in Year Book No. 53, page 1062.

Mineral resources

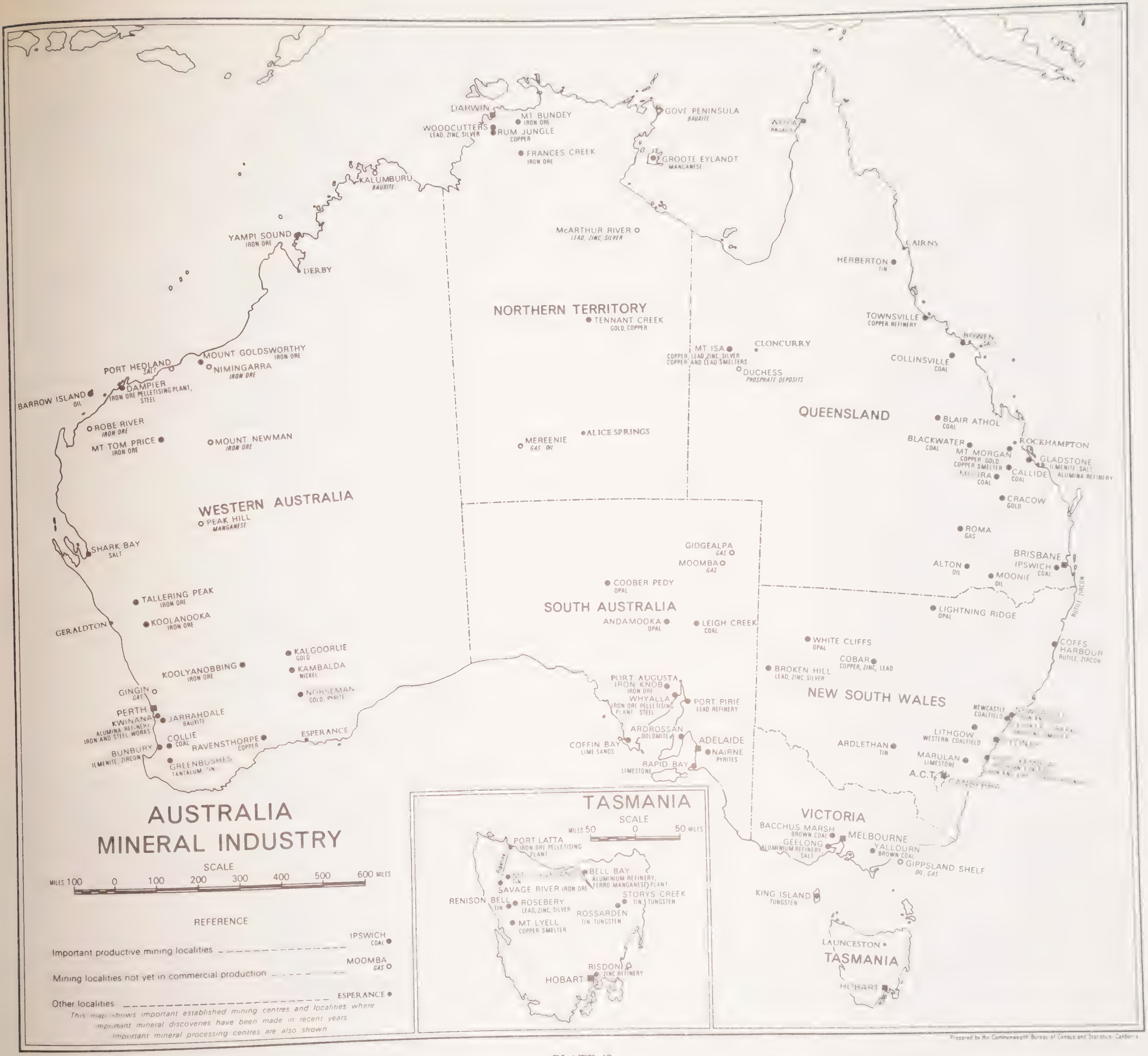
Australia is self-sufficient in most minerals of economic importance and much more than self-sufficient in some. The following table summarises, in a general way, known reserves and production of the principal metals and minerals in relation to Australian consumption of these commodities and present export availability. Many qualifications are necessary to a simple summary of this kind, and the table should be read in conjunction with the following detailed notes on principal minerals.

RESERVES OF MINERALS: AUSTRALIA

(*Source:* Bureau of Mineral Resources, Geology and Geophysics)

Production	*Reserves adequate*	*Reserves uncertain*	*Reserves negligible*
Production sufficient for domestic demand and exports	Barite Bauxite Cadmium Coal (black) Copper Gold Gypsum Iron ore Lead	Beryl Talc Tantalite	

For footnotes *see* next page.


AUSTRALIA
MINERAL INDUSTRY
SCALE
MILES 100 0 100 200 300 400 500 600 MILES
REFERENCE
Important productive mining localities
IPSWICH COAL
Mining localities not yet in commercial production
MOOMBA GAS
Other localities
ESPERANCE
This map shows important established mining centres and localities where important mineral discoveries have been made in recent years. Important mineral processing centres are also shown
WESTERN AUSTRALIA
NORTHERN TERRITORY
QUEENSLAND
SOUTH AUSTRALIA
NEW SOUTH WALES
VICTORIA
A.C.T.
CANBERRA
TASMANIA
DARWIN
WOODCUTTERS LEAD, ZINC, SILVER
MT BUNDEY IRON ORE
RUM JUNGLE COPPER
FRANCES CREEK IRON ORE
GOVE PENINSULA BAUXITE
GROOTE EYLANDT MANGANESE
KALUMBURU BAUXITE
YAMPI SOUND IRON ORE
DERBY
McARTHUR RIVER LEAD, ZINC, SILVER
TENNANT CREEK GOLD, COPPER
MT ISA COPPER, LEAD, ZINC, SILVER COPPER AND LEAD SMELTERS
CLONCURRY
DUCHESS PHOSPHATE DEPOSITS
MEREENIE GAS OIL
ALICE SPRINGS
PORT HEDLAND SALT
MOUNT GOLDSWORTHY IRON ORE
NIMINGARRA IRON ORE
DAMPIER IRON ORE PELLETISING PLANT, STEEL
BARROW ISLAND OIL
ROBE RIVER IRON ORE
MT TOM PRICE IRON ORE
MOUNT NEWMAN IRON ORE
PEAK HILL MANGANESE
SHARK BAY SALT
TALLERING PEAK IRON ORE
KOOLANOOKA IRON ORE
GERALDTON
KALGOORLIE GOLD
KAMBALDA NICKEL
NORSEMAN GOLD, PYRITE
KOOLYANOBBING IRON ORE
GINGIN GAS
PERTH
KWINANA ALUMINA REFINERY, IRON AND STEEL WORKS
JARRAHDALE BAUXITE
COLLIE COAL
BUNBURY ILMENITE, ZIRCON
RAVENSTHORPE COPPER
GREENBUSHES TANTALUM, TIN
ESPERANCE
WEIPA BAUXITE
CAIRNS
HERBERTON TIN
TOWNSVILLE COPPER REFINERY
BOWEN
COLLINSVILLE COAL
BLAIR ATHOL COAL
BLACKWATER COAL
ROCKHAMPTON
MT MORGAN COPPER, GOLD, COPPER SMELTER
GLADSTONE ILMENITE, SALT ALUMINA REFINERY
MOURA COAL
CALLIDE COAL
CRACOW GOLD
ROMA GAS
BRISBANE
IPSWICH COAL
ALTON OIL
MOONIE OIL
RUTILE, ZIRCON
GIDGEALPA GAS
MOOMBA GAS
COOBER PEDY OPAL
ANDAMOOKA OPAL
LEIGH CREEK COAL
LIGHTNING RIDGE OPAL
COFFS HARBOUR RUTILE, ZIRCON
WHITE CLIFFS OPAL
COBAR COPPER, ZINC, LEAD
BROKEN HILL LEAD, ZINC, SILVER
PORT AUGUSTA
IRON KNOB IRON ORE
WHYALLA IRON ORE PELLETISING PLANT, STEEL
PORT PIRIE LEAD REFINERY
ARDROSSAN DOLOMITE
COFFIN BAY LIME SANDS
ADELAIDE
NAIRNE PYRITES
RAPID BAY LIMESTONE
NEWCASTLE COALFIELD
LITHGOW WESTERN COALFIELD
ARDLETHAN TIN
MARULAN LIMESTONE
BACCHUS MARSH BROWN COAL
MELBOURNE
GEELONG ALUMINIUM REFINERY, SALT
YALLOURN BROWN COAL
GIPPSLAND SHELF OIL, GAS
KING ISLAND TUNGSTEN
LAUNCESTON
HOBART
TASMANIA
SCALE
MILES 50 0 50 MILES
PORT LATTA IRON ORE PELLETISING PLANT
Pipeline
SAVAGE RIVER IRON ORE
BELL BAY ALUMINIUM REFINERY, FERRO MANGANESE PLANT
STORYS CREEK TIN, TUNGSTEN
RENISON BELL TIN
ROSEBERY LEAD, ZINC, SILVER
ROSSARDEN TIN, TUNGSTEN
MT LYELL COPPER SMELTER
RISDON ZINC REFINERY
HOBART

Prepared by the Commonwealth Bureau of Census and Statistics, Canberra

PLATE 49

RESERVES OF MINERALS: AUSTRALIA—*continued*

Production	*Reserves adequate*	*Reserves uncertain*	*Reserves negligible*
Production sufficient for domestic demand and exports	Manganese ore (metallurgical) Mineral sands(*a*) Nickel Opal Salt Silver Tin Tungsten Zinc		
Production sufficient for domestic demand	Clays (except light grade china clay) Coal (brown) Dolomite Felspar Limestone	Glass sands Sillimanite	
Production not sufficient for domestic demand	Bismuth Lithium minerals Phosphate rock Sulphides (as source of sulphur)	Abrasives Antimony Bentonite China clay Chromite Cobalt Diatomite Fluorite Magnesite Manganese ore (chemical) Mercury Mineral pigments Petroleum Platinum	Asbestos (chrysotile) Molybdenum
Production nil	Magnesium Potassium salts	Arsenic Asbestos (crocidolite) Diamonds Graphite Vanadium Vermiculite	Borates Nitrates Sulphur

(*a*) Ilmenite, monazite, rutile, zircon.

Aluminium

As a result of the recent discoveries at Weipa, Gove and the Darling Range, Australia's reserves of bauxite are known to be very large, perhaps the largest in the world. Total reserves in the Weipa region are in excess of 2,000 million tons, while the deposits at Gove are reported to contain up to 250 million tons of bauxite. The Darling Range deposit has nearly 80 million tons of proved reserves, and preliminary estimates by the company indicate that the base areas contain at least 500 million tons of economic bauxite. In addition, another significant deposit of about 200 million tons has so far been proved in the Kimberley district of Western Australia.

Coal

Australia has coal resources adequate to provide for future domestic requirements and a substantial export surplus. These resources include coal of all types, except pure anthracite. Australia's coal reserves are concentrated mainly in the mainland eastern States. The bituminous coal is located mainly in New South Wales and Queensland; Victoria has very substantial brown coal reserves in the Latrobe Valley. A table showing Australian coal reserves is published in Year Book No. 53, page 1065.

Copper

The principal deposit of this metal is at Mt Isa, where ore reserves were estimated at 46.5 million tons in 1968. Recent discoveries have indicated very large additional reserves at Mt Isa, and further exploration and testing is proceeding. Other important deposits are situated at Cobar, New South Wales, Mt Morgan, Queensland, and Mt Lyell, Tasmania. Small deposits at Ravensthorpe, Western Australia, and Tennant Creek, Northern Territory, have also been developed.

Crude oil

From recent exploratory activity it is now apparent that Australia possesses substantial resources of crude oil. The Moonie and Alton fields in Queensland, and the Barrow Island field in Western Australia have been producing since 1964, 1966 and 1967 respectively. The Kingfish, Halibut, Marlin and Barracouta fields in the off-shore Gippsland Basin should begin commercial production in late 1969. Current recoverable reserves in Australia are conservatively estimated to be 1,800 million barrels and with exploration activity continuing at a high level there is a possibility of further upward revision of these estimates in the near future.

Gold

Australia's gold resources are heavily concentrated in Western Australia, mainly in the Kalgoorlie–Coolgardie area. However, small deposits of gold-bearing ore occur in all States. In addition, gold is commonly obtained as a by-product of other mining activities, particularly copper mining. Gold ore reserves at Kalgoorlie were estimated at more than 13.5 million tons in 1967, with a gold content of 5.64 dwt per ton.

Iron ore

In recent years very extensive deposits of iron ore have been discovered in Australia. These discoveries have established Australia as one of the most important iron ore provinces in the world. The largest deposits are located in the Hamersley and Ophthalmia Ranges of north-west Western Australia. Other commercially important deposits of iron ore are situated in the Savage River area of Tasmania, in the Middleback Ranges of South Australia, at Yampi Sound, Koolyanobbing, and Tallering Peak in Western Australia, and at Mt Bundey and Frances Creek in the Northern Territory. These deposits are adequate to supply the estimated needs of the Australian iron and steel industry far into the future, as well as providing a large export availability. Total Australian reserves are estimated to be more than 16,000 million tons.

Lead-zinc

Since the discovery in 1883 and subsequent development of the ore body at Broken Hill, Australia has been a major producer of lead and zinc. Ore reserves in the Broken Hill area are stated to exceed 17 million tons, and further exploration is being undertaken to extend reserves. Mt Isa, with ore reserves of 32 million tons, is the major lead-zinc deposit in Queensland, and further substantial reserves exist in adjacent leases. In Tasmania substantial lead-zinc deposits are situated at Read-Rosebery near the west coast. In the Northern Territory lead-zinc ore bodies have been located at Macarthur River and at Woodcutters near Rum Jungle. A small zinc silicate ore body is to be developed at Beltana, South Australia.

Manganese

Australia's known reserves of manganese, which is highly important for the iron and steel industry, are in excess of domestic requirements, and exports have increased sharply in recent years. The principal deposits currently being worked are in the Pilbara and Peak Hill areas of Western Australia and on Groote Eylandt in the Gulf of Carpentaria. Reserves on Groote Eylandt are substantial.

Mineral sands

Ores of titanium (rutile and ilmenite), zirconium (zircon) and thorium (monazite) occur in beach sands over extensive areas of the north and central coasts of New South Wales, the south and central coasts of Queensland, and the south-western corner of Western Australia. Resources are large and easily workable. Australia's reserves of rutile represent a large proportion of the world's reserves of this mineral.

Natural gas

Several significant discoveries of natural gas have been made throughout Australia, the most notable being the Barracouta and Marlin fields in Bass Strait, off-shore Victoria, where reserves are estimated to be approximately 5 U.S. trillion cubic feet. Commercial production from these fields commenced in March 1969.

In Queensland numerous gas fields have been discovered in the Roma area and to the north near Rolleston. The combined reserves estimate is approximately 215 U.S. billion cubic feet. Other fields at Gidgealpa and Moomba in South Australia, which are to supply Adelaide in the near future, have combined estimated reserves of 1.5 U.S. trillion cubic feet. To this must be added the as yet unknown reserves of the nearby Daralingie and Toolache prospects. In Western Australia significant discoveries have been made at Yardarino, Gingin, and Dongara where reserves are thought to be of the order of 500 billion cubic feet; also in this region, significant reserves of natural gas are indicated in the Mondarra prospect. In the Northern Territory the Mereenie and Palm Valley fields show evidence of 1.5 U.S. trillion cubic feet gas reserves, in association with some crude oil.

Nickel

Deposits of nickel have been discovered in Western Australia, central Australia, and Queensland. At Kambalda, near Kalgoorlie in Western Australia, there are reserves of more than 9 million tons of high grade nickel ore.

Phosphate rock

Accelerated search for phosphate rock commencing in late 1964 resulted in the discovery of major deposits in north-west Queensland in 1966. Detailed assessment and feasibility studies have yet to be completed.

Tin

The main deposits of tin now being exploited are in the Herberton field inland from Cairns, Queensland, in north, west, and central Tasmania, in the Pilbara region and in the south-west of Western Australia, and in the New England area, at Mt Tallebang, and Ardlethan in New South Wales. As the result of exploration and expansion of known deposits in recent years, Australia is now self-sufficient in tin.

Tungsten

The main deposits of tungsten ores are in northern Tasmania (wolfram) and on King Island (scheelite). Australia's own requirements are small, and production is principally for export.

Uranium

Australia's known reserves of uranium ore were exploited during the years 1953 to 1963. During this period substantial quantities of uranium concentrate were exported to the United Kingdom and the United States. In May 1967 it was stated that reserves of 11,620 short tons of uranium oxide were reasonably assured and a further 3,230 short tons were possible but not proven; of these reserves, 10,660 short tons were said to be economically recoverable within the price range $5 to $10 per pound and 4,190 short tons economically recoverable within the price range $10 to $30 per pound.

Administration

For all practical purposes all mineral rights in Australia are vested in the Crown. In the States, sovereign rights are held by the State Governments with respect to mineral resources within their boundaries. In the Territories of the Commonwealth these rights are vested in the Commonwealth Government. The Commonwealth Government is able also to influence over-all development and production activity in the mineral industry by virtue of its statutory powers with respect to international trade, customs and excise, taxation, and loan raisings. Certain specially formed bodies such as the Joint Coal Board and the Australian Atomic Energy Commission have been given administrative responsibility in defined areas.

Control of mining

Each State or Territory in the Commonwealth has its own mining Acts or Ordinances and regulations governing the prospecting for and working of mineral deposits. These Acts, etc. are similar in principle, but differ in detail. They all make provision for the following tenures.

(i) The holding of a miner's right gives the holder the right to prospect on Crown Land, and to use the timber and water necessary for his operations. The miner's right does not give the power to remove or sell any mineral.

(ii) Small mining leases, having a maximum area of about 100 acres, necessitate the payment of rent and, in most cases, a royalty. There is usually no limit on the number of such leases which may be held by any one person, partnership, private or public company. In practice a restriction is imposed by the requirement that a lease must be continuously worked, or that work to a given value must be done annually, but exemption from the labour requirements may be obtained under certain circumstances. The exemption is given for limited periods only, and where the labour requirements are not met and exemption has not been granted any person may apply for forfeiture of the lease in his favour. If the rental is not paid the lease is forfeited.

Provision is also made in the various Acts and Ordinances for prospecting areas, claims, etc. Such areas, claims, etc. are all quite limited in size and from the practical viewpoint are cheap forms of mining lease which carry limited powers relating to the removal of minerals. A very large enterprise may take the course of acquiring mining titles by negotiation with the appropriate Minister for Mines and having the agreed terms and conditions embodied in an Act of the State Parliament. This method of acquisition has been used in several cases where the leasing company undertook an obligation (such as the erection of a large treatment works) in return for leases over large areas for a long period, and has become more common in recent years, particularly where very large-scale capital intensive projects are involved (e.g. iron ore in Western Australia, coal and bauxite in Queensland, bauxite in the Northern Territory).

The following table sets out particulars of the areas occupied under mining Acts and Ordinances in the several States and Territories for the period 1964 to 1968. Further details of the various types of mining lease and licence are given in Year Book No. 48, pages 94–5.

AREAS OCCUPIED UNDER MINING ACTS AND ORDINANCES STATES AND NORTHERN TERRITORY, 1964 TO 1968

('000 acres)

Year	*N.S.W.(a)*	*Vic.*	*Qld(b)*	*S.A.(a)(b)*	*W.A.(c)*	*Tas.*	*N.T.*	*Total*
1964	956	50	2,097	7,894	221	40	61	11,319
1965	1,015	60	2,494	6,621	263	43	61	10,557
1966	1,083	84	2,591	29,638	343	53	36	33,828
1967	1,177	74	2,304	15,508	372	58	37	19,530
1968	1,146	81	2,618	14,521	705	65	43	19,179

(a) Year ended 30 June. (b) Excludes lands held under miners' rights and dredging claims. (c) Excludes holdings under miners' rights.

Control of exploration

Following the introduction of large-scale modern prospecting methods (particularly air-borne prospecting), small prospecting areas were found to be unsuitable, and steps have been taken in the States and Territories to ensure the availability of large areas for prospecting by interested persons. Large areas may be made available in either of the following ways:

(i) by the Minister of Mines withdrawing an area from the provisions of the Mining Act and giving an informal agreement that the prospector would have preference in applying for titles to leases within the area; or

(ii) by provision within the Mining Acts or Ordinances for the issue of authorities to prospect over an area defined by a written agreement which also sets out provisions as to the amount of money to be spent, methods of prospecting, tenure of the agreement, etc.

The tenure of such areas is limited, usually to one or two years only, and, if renewed for a further period, is only over an area selected from the larger area as a result of work done during the life of the initial agreement. Neither form of prospecting concession gives the holder any rights over, or authorities to prospect on, land already held under a mining title within the agreed area. Unless specifically stated in an agreement, the discovery of minerals, whether inside or outside an area covered by an authority to prospect, gives the discoverer no legal rights except the right to apply for a mining lease over the area in which the discovery was made. Suitable prospects are converted to mining tenements by making application for lease under the appropriate mining Act.

The above discussion refers in general to the exploration for all types of mineral deposits in Australia. Additional information relating to the search for petroleum is given below.

Control of petroleum exploration

On-shore. In Australia, all petroleum on or below the land is, and shall be deemed always to have been, the property of the Crown. Consequently, full control of petroleum mining rights is vested in the Government or Administration of each State or Territory. Any company, syndicate, or individual proposing to join in the search for petroleum must first satisfy the Government concerned that the necessary financial resources are available to carry out exploration activity.

The names given to different types of exploration permits differ with variations in petroleum legislation from State to State, but there are in general, three basic types of permits: (*a*) permit for geological and geophysical survey; (*b*) licence for more detailed surveys and exploration drilling; (*c*) leases for commercial production.

In most States, the minimum permit area is 1,000 square miles, however in the Northern Territory, it is 500 square miles and in Queensland and Tasmania it is left to the discretion of the Minister of Mines. The maximum permit area in the Northern Territory is 10,000 square miles and in New South Wales and Victoria 5,000 square miles. In Queensland and Tasmania the size of the area is left to the discretion of the Minister of Mines and in South Australia and Western Australia there is no limit.

The term of the initial permit varies from State to State. The period being five years in South Australia and the Northern Territory, two years in New South Wales, Victoria and Western Australia and at the discretion of the Minister of Mines in Queensland and Tasmania. The term of the permit may be extended at the Minister's discretion in the light of valid reasons submitted by the holder or for periods designated in the legislation. All permits carry obligations to initiate geological and/or geophysical surveys, usually within three or six months of the granting of the permit. Quarterly reports, maps and other relevant data are required.

Licence areas vary between States as do terms, bonds, etc. The maximum licence area is 200 square miles in all States except Tasmania where it is five square miles. The licence stage in the Northern Territory was omitted by a 1966 Amendment. The minimum area varies between 8 square miles in New South Wales, South Australia and Western Australia and no minimum in Victoria, Queensland and Tasmania. There is no limit on the number of licences that may be held by one holder in all States except Tasmania, where it is limited to one. The term of initial licence is five years in South Australia, four years in New South Wales and Victoria and two years in each of Queensland, Western Australia and Tasmania. There is provision in all States for renewal for periods ranging from one to five years. Licences carry obligations that a more detailed survey be carried out, usually within three to six months of the granting of the licence. In some cases, drilling is also required. Quarterly reports, maps, samples, etc. are a requisite.

Leases. If exploration during the permit and licence shows promise then a lease is usually granted, which gives the right to produce petroleum. The maximum lease area in the Northern Territory is 1,000 square miles. In all other States it is 100 square miles except in Tasmania where it is at the discretion of the Minister for Mines. The minimum area of a lease is four square miles in New South Wales, South Australia and Western Australia and no minimum has been set for the remaining States and the Northern Territory.

In most States there is no limit to the number of leases that may be held by one holder, however in Queensland the maximum number of leases permitted to any one holder is five. The initial term of the lease in most cases is twenty-one years and it may be renewed for a similar period; however in New South Wales the period is twenty years and in Victoria it is fifteen years. In all States and the Northern Territory except Queensland drilling for production must begin within six months of the granting of the lease. In Queensland the period is within three months. Sound oilfield practice and approved safety measures must be observed at all times.

Off-shore. The Petroleum (*Submerged Lands*) *Act* 1967 was assented to on 22 November 1967. This Act is the instrument whereby the control and safeguarding of the exploration for, and the exploitation of, petroleum resources on the territorial sea-bed, and on the outer continental shelf are assured. Complementary legislation was passed by each State Government and by the Federal Government, the laws becoming fully effective on 1 April 1968.

The State Governments administer the legislation and collect all rents and fees, but the granting of tenements is subject to Federal Government approval, because of its commitments on defence, customs, navigation, external affairs, etc.

Basically, the legislation consists of a two-stage system of tenements—exploration and production.

Exploration Permit. All off-shore areas are divided into graticular blocks, each being 5 minutes of arc of longitude by 5 minutes of arc of latitude. This approximates to 30 square miles in Northern Australia and 25 square miles in Southern Australia, the reduction being due to the decrease in latitude length from the Equator to the South Pole. An Exploration Permit may be granted for a maximum of 400 such blocks (10–12,000 square miles), and covers all forms of exploration, including drilling, but all work programmes are subject to Government approval. There is no limit to the number of permits which may be granted to any one holder. The initial term is six years, with successive renewal periods of five years each. At each renewal, the holder is required to surrender one half of the permit area, with Governmental discretion to allow a minimum area of sixteen blocks (400–480 square miles).

An annual fee equivalent to $5 per block, ($100 minimum) is payable to the adjacent State in respect of each permit.

Production Licence. On discovery of petroleum, the permittee must nominate one block as the centre of a 'location' comprising all available contiguous blocks, thus giving a 'location' of nine blocks (three by three). Within two to four years thereafter, the permittee may apply for a primary Production Licence covering not more than five blocks in the 'location', the remaining four blocks reverting to the Crown. The licensee may apply for a secondary licence for any or all of these four blocks. The State may offer for sale any location blocks which the holder of a primary licence may not wish to retain.

The standard royalty payable is 10 per cent of the well-head value of the petroleum produced if only the first five blocks are retained. Should a secondary licence be granted for any or all of the remaining four blocks, an over-riding royalty of up to 2½ per cent is applicable and is negotiated between the adjacent State and the licensee, which would raise the total royalty payable up to a maximum of 12½ per cent of the well-head value.

Royalty is shared between the State and the Federal Governments on a 60:40 basis in the 'primary' case, and the State retains all overriding royalties in the 'secondary' case. The State also receives an annual licence fee of $3,000 per block in each licence, and the proceeds from sales of relinquished blocks.

Production licences are issued for a term of twenty-one years, with the right of renewal for further periods of twenty-one years.

The only licences issued so far under this legislation have been for the Gippsland Shelf prospects, where primary and secondary licences were granted over the maximum 'location' of nine blocks for each of the four fields to be developed initially. The following table shows rates of royalty and expiry dates:

LICENCES ISSUED FOR GIPPSLAND SHELF

Field	*Royalty Rate*	*Licences Expire*
	%	
Barracouta	11	31.3.88
Marlin	11	31.3.88
Halibut	12½	13.5.89
Kingfish	12½	17.7.89

The off-shore legislation gives the holder of a production licence a preferential right to a pipe-line licence. This licence allows the construction and operation of a marine pipeline for transmission of petroleum from field to shore. Licence renewal is available on expiry.

AREAS OCCUPIED UNDER PETROLEUM EXPLORATION AND DEVELOPMENT TITLES : STATES AND NORTHERN TERRITORY, 1964 TO 1968

('000 acres)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*Total*
1964	176,768	64,895	595,865	351,526	831,948	35,325	216,188	2,272,518
1965	156,439	58,921	609,058	376,326	762,921	54,375	268,673	2,236,713
1966	151,122	43,561	621,506	371,236	672,609	54,775	289,144	2,208,953
1967	117,020	49,786	389,780	353,634	643,158	59,342	222,353	1,840,073
1968(*a*) . . .	77,593	51,436	327,714	323,844	549,854	54,237	156,318	1,546,101

(*a*) To 30 June 1968.

Mineral royalties

The collection by governments of royalties for the production of minerals within their area of authority is an internationally accepted practice. In Australia the responsibility for mineral royalties is largely a State concern, and all States currently collect some form of mineral royalty payments. In the past most States have relied on an established system of standard rates which were uniform for all producers of any particular mineral in the State concerned. These charges were either a fixed monetary amount per ton (e.g. 5c per ton on gypsum mined in New South Wales) or an *ad valorem* royalty (e.g. 1.5 per cent of gross value of gold produced in New South Wales).

In recent years there has been an important basic change in the system of establishing royalty commitments, and it is now quite common for State Governments to negotiate special royalty rates with companies which are seeking mineral leases for large scale developments. These royalty rates may vary, depending on whether production is for export or for domestic processing. The rates for a particular mineral may also vary between producers. Important examples of this type of royalty agreement are the iron ore development agreements in Western Australia and coal development agreements in Queensland. Mineral royalties received by State Governments in recent years are shown in the table below.

MINERAL ROYALTY RECEIPTS: STATES AND NORTHERN TERRITORY 1963–64 TO 1967–68

($)

State or Territory	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
New South Wales	5,090,622	19,946,772	24,317,168	16,326,973	11,029,697
Victoria(*a*)	94,072	494,128	546,117	597,639	661,214
Queensland	642,560	1,201,264	1,183,046	2,241,575	1,711,503
South Australia	860,371	926,984	985,560	1,091,582	1,036,552
Western Australia	243,182	291,354	478,295	2,639,895	6,237,593
Tasmania	712	1,376	2,570	6,306	11,105
Northern Territory . . .	68,682	80,894	88,727	110,574	290,701

(*a*) Includes, in addition to mineral royalties receipts, mine-tailing licences and rents.

Control of exports

The Commonwealth Government maintains export controls over certain minerals and metals. These controls are enforced by means of Customs (Prohibited Exports) Regulations as amended from time to time by Statutory Rules. The Commonwealth authorities having jurisdiction over mineral and metal exports, together with the relevant products, are listed below. A clearance to export is needed in each case.

Department of National Development—iron ores, beneficiated iron ores and iron concentrates; mineral sands (whether treated or untreated), and concentrates of mineral sands, containing zircon, rutile or ilmenite; manganese ores; beryllium ores and concentrates; tin ores and concentrates, refined tin in the form of ingots or in any other refinery form, and any of the following materials from which tin may be obtained, being materials resulting from the refining of tin, that is to say residues, slag, dross, dust and other wastes; copper matte, blister copper, copper anodes, copper cathodes, copper ingots, copper rods, copper scrap, copper refinery shapes in the form of ingots, wire bars, billets, cakes, rolling blocks, or ingot bars; copper alloys in the form of ingots, billets, cakes, rolling blocks, or ingot bars; copper alloy scrap; any of the following materials from which copper may be obtained, that is to say, residues, speiss, slag, dross, scale, sweepings, ash, sludge, slime, dust and wastes.

Department of Primary Industry—phosphate rock, phosphate and superphosphate, and fertilisers containing phosphate or superphosphate.

Australian Atomic Energy Commission—minerals, raw and treated (including residues and tailings) containing more than 0.05 per cent of uranium or thorium, singly or together; uranium and thorium minerals including pitchblende and monazite; uranium. thorium, beryllium and lithium metals, compounds and alloys; hafnium-free zirconium metal, alloys and compounds; nickel metal in certain forms.

In addition to these controls which are, in general, of fairly long standing, the Commonwealth Government has imposed export controls on copper and copper-bearing materials in recent years. These controls have been administered by the Department of National Development. The Commonwealth Government announced on 5 March 1969 that the ban on the export of copper scrap and ingots, and copper alloy scrap and ingots would be continued. Export permits are freely issued for primary copper materials, copper anodes (for electro-plating purposes) and copper rods. Exports of copper scrap and ingots and copper alloy scrap and ingots are in general prohibited, but consideration will be given to the issue of export permits for ingots of certain copper master alloys, and nickel silver (copper-based) scrap contaminated with solder or certain other metals. Export permits are generally issued also for copper residues, dross, ashes, slag and similar materials.

Export controls on tin and other tin-bearing materials were introduced by the Commonwealth Government on 23 December 1968 for reasons arising from Australia's membership of the International Tin Agreement. Under the provisions of the Agreement Australia was requested by the International Tin Council to co-operate with other producers of tin by way of exercising some restraint on its exports of tin.

Joint Coal Board

The Joint Coal Board was established in 1946 under joint legislation of the Commonwealth and of the State of New South Wales to carry out special administrative functions in regard to the New South Wales black coal mining industry. A summary of these functions is given below.

(i) To ensure that coal is produced in the State of New South Wales in such quantities and with such regularity as will meet requirements throughout Australia and in trade with other countries;
(ii) to ensure that the coal resources of the State are conserved, developed, worked, and used to the best advantage in the public interest;
(iii) to ensure that coal produced in the State is distributed and used in such manner, quantities, classes and grades, and at such prices as are calculated best to serve the public interest and secure the economical use of coal and the maintenance of essential services and industrial activities; and
(iv) to promote the welfare of workers engaged in the coal industry in the State.

Australian Atomic Energy Commission

During 1953, Commonwealth legislation was enacted to set up an Atomic Energy Commission which is responsible, in an overall sense, for the production and utilisation of uranium in Australia. This Act, the *Atomic Energy Act* 1953, superseded the *Atomic Energy* (*Control of Materials*) *Act* 1946, but retains a provision of that Act which provides for the control of substances which could be used for production or use of atomic energy.

The functions of the Commission fall under two main headings. Firstly, it is responsible for undertaking and encouraging the search for and mining of uranium and is empowered to co-operate with the appropriate authorities of the States in connection with these and related matters. Secondly, it is authorised to develop the practical uses of atomic energy by constructing and operating plant for this purpose, carrying out research and generally fostering the advancement of atomic energy technology. The Commission functions under the direction of the Minister for National Development.

Government assistance

The Commonwealth Government and the various State Governments provide assistance to the mineral industry in a variety of ways. The main forms of assistance are discussed below.

Commonwealth Government assistance

Assistance provided by the Commonwealth Government takes the form of income taxation concessions, subsidies, bounties, and technical assistance mainly through the work of the Bureau of Mineral Resources and the Commonwealth Scientific and Industrial Research Organization. A table showing direct Commonwealth Government payments to sectors of the mineral industry is included on page 1004.

Income taxation concessions. One-fifth of the net income derived from mining for prescribed minerals in Australia or the Territory of Papua and New Guinea is exempt from tax. Principal minerals to which this concession applies are as follows: asbestos, bauxite, radio-active ores, rutile and zircon; and ores of copper, nickel and tin.

Income derived from mining principally for gold in Australia or the Territory of Papua and New Guinea is exempt from tax. The exemption is also available in respect of income derived from mining principally for gold and copper if the value of the gold obtained is not less than 40 per cent of the value of the total output.

Dividends paid wholly and exclusively out of exempt mining income are also exempt from tax.

One-third of call moneys paid by resident and non-resident investors on non-redeemable shares in a company, whose principal business is mining or prospecting for minerals in Australia or the Territory of Papua and New Guinea, is allowable as a deduction from the investors' assessable income. Where the shares in such a company are issued after 9 May 1968, the deduction is dependent upon the company lodging a declaration that the call moneys have been, or will be, expended exclusively on the search for minerals (including petroleum) obtainable by mining.

Other valuable assistance has been given in the form of certain taxation concessions to encourage the search for petroleum and other minerals. Resident investigators are permitted, for tax purposes, to deduct from their assessable income all application, allotment and call moneys paid for shares issued by petroleum exploration companies or companies engaged in prospecting or mining for other minerals obtainable by mining. These deductions are allowable only if the company elects to forgo an equivalent amount of the special deductions for capital expenditure to which it would otherwise be entitled. Many companies engaged in exploring for petroleum and other minerals have elected to pass on this benefit to their shareholders.

Special deductions for capital expenditure incurred in the discovery and mining of petroleum are allowable to a company deriving income from the sale of petroleum, and products of that petroleum, mined by the company in Australia or the Territory of Papua and New Guinea. A company is entitled to these deductions only when it produces Australian petroleum in commercial quantities. The general effect of the deductions is to free the proceeds from the sale of Australian or Territory petroleum and its products from tax until all allowable capital expenditure has been fully recouped. Dividends paid wholly and exclusively out of profits so freed from tax are exempt.

Capital expenditure allowable to petroleum exploration companies includes, broadly, the cost of exploratory surveys, drilling and well-head plant, access roads and expenditure on housing and welfare.

A company mining or prospecting for minerals other than petroleum and gold may also be allowed special deductions for capital expenditure. Broadly, allowable capital expenditure includes expenditure on exploration and prospecting, preparation of a site for extractive mining operations, buildings, other improvements and plant necessary for those operations, access roads, certain treatment plant and housing and welfare.

The allowable capital expenditure of a general mining company may be deducted over the life of the mine, or twenty-five years, whichever is the lesser. Alternatively, the mine owner may elect to have the allowable capital expenditure deducted in the year it is incurred or, where appropriations have been made for such expenditure to be incurred in the following year, the deduction may be allowed in the year of the appropriation. Annual deductions for depreciation on mining plant may be allowed in lieu of spreading the cost over the life of the mine. Expenditure on housing and welfare may, at the option of the mine owner, be allowed over the life of the mine, or five years.

Special deductions are allowable for capital expenditure incurred on certain transport facilities used primarily and principally in relation to minerals mined in Australia, for the transport of raw minerals and certain specified products obtained from the processing of such minerals, or for transporting petroleum between the oil or gas field and a refinery or other terminal. The special deduction applies to expenditure incurred on a railway, road, pipe-line or similar transport facility. Allowable expenditure on transport facilities is deductible in equal annual instalments over a period of ten years.

Petroleum search subsidy. In 1957 the Commonwealth Government introduced the *Petroleum Search Subsidy Act* 1957 whereby stratigraphic drilling operations were subsidised to the extent of 50 per cent of cost. The *Petroleum Search Subsidy Act* 1959 widened the scope of operations for which subsidy was offered to include all types of geophysical surveys and off-structure drilling operations. Another amendment in 1961 further widened the scope of the 1959 Act to provide subsidy for test drilling and detailed structure drilling operations. It also provided for the calculation of drilling subsidies on a footage basis as an alternative to the total cost basis. A sum of $10 million was allocated to the petroleum search subsidy scheme for 1962–63 compared with an allocation of $5.4 million in the previous year. Applications for subsidy increased to such an extent, however, that in spite of the increased allocation, the maximum rate of subsidy was reduced from 50 per cent of the allowable cost of approved operations to 30 per cent.

The *Petroleum Search Subsidy Act* 1959–1964 was amended in June 1967 to extend Commonwealth subsidy for a further one year. The *Petroleum Search Subsidy Act* 1959–1967 provides subsidy for approved geophysical surveys and test and stratigraphic drilling operations; bore-hole surveys and detailed structure drilling are no longer eligible. As in the previous Act, an applicant may elect to receive subsidy for both types of drilling operations on either a footage basis or a total cost basis. In addition, the production testing of any well approved for subsidy is also eligible for additional subsidy. Under the Act the Minister may vary the rates of subsidy for prescribed operations, but they may not exceed one-half the total cost. The present rates of subsidy for approved operations on a cost basis are 30 per cent for test-drilling and 40 per cent for stratigraphic drilling. The rate for all types of geophysical operations is 30 per cent. The 1959–1967 Act also specifies that exploration for petroleum on the Australian continental shelf is eligible for subsidy retrospective to 1959. The Federal budget for 1968–69 contained an appropriation of $19.3 million for subsidies under the Act. Payments under this Act in each of the years 1964 to 1968 are shown in the table on page 1004.

On 28 October 1964 the Minister announced that action was necessary to limit the burden of the Commonwealth subsidy scheme on the Australian taxpayer in view of the many recent encouraging discoveries of oil and gas which were now providing the incentive to further exploration. To this end the Minister announced that operations within certain defined areas around discovery wells and fields would not be approved for subsidy. For the present, projects in the following areas would not be eligible for subsidy: twenty miles from a gas well; thirty miles from an oil well; forty miles from a gas field; fifty miles from an oil field. Specified areas excluded from subsidy payments are periodically announced by the Minister.

Pricing of Australian crude oil. Early in 1965 the Tariff Board conducted a public inquiry to determine an appropriate price for Australian crude oil, having regard to the Commonwealth Government's desire to encourage the search for oil and the consequent need to offer sufficient incentive to exploration companies. At the same time the Government indicated that it was anxious to prevent or minimise increased costs of petroleum products to consumers and to ensure that refineries using Australian crude oil were not detrimentally affected in relation to other refineries. Evidence was heard from oil exploration, marketing and refining interests, government officials, coal and power interests, and major users of refined petroleum products. The Tariff Board recommended at that time that Australian crude oil should be valued at $US 2.48 ($A 2.21) a barrel at the nearest refinery centre, plus a differential for the quality of the oil produced. The Government adopted the Tariff Board's recommendations, and raised the incentive margin to 67 Australian cents a barrel; this margin to apply to all Australian crude oil producers.

To ensure that indigenous crude oil is used to the maximum extent in Australian refineries, the Government also adopted the Tariff Board's recommendation to impose penal import duties of 0.8 cents a gallon on crude oil and 2.4 cents a gallon on motor spirit to be paid by the companies which do not take their share of local crude oil. The share of local crude to be taken will be based on the importer's share of total imports of refinery feedstock or refined products or both.

Any oil found in the Territory of Papua and New Guinea will be covered by these policies in the same way as oil found in Australia.

Under these arrangements the price of Moonie crude is $A3.14 a barrel delivered Brisbane, broken down as follows: crude oil value $2.21; incentive margin $0.67; quality differential $0.26.

Subsequently, the Barrow Island field began production and is $3.24 a barrel delivered Kwinana.

This pricing structure was to remain operative until 17 September 1970.

However, the discovery of very large crude oil reserves in the Gippsland Shelf fields, due to begin production in 1969, revealed that this pricing structure could result in the Australian consumer paying more for indigenous petroleum products, than for similar products refined from imported crude oils. Following negotiations with the Commonwealth Government the Gippsland Shelf operators agreed to forego the $0.67 a barrel incentive, plus a further $0.05 per barrel. This will result in the pricing of Gippsland Shelf crude oil at $2.47 per barrel in the early stages of production and $2.44 per barrel in the third quarter of 1970 to 17 September 1970, i.e. the original price of $3.19 minus 72 cents (incentive plus 5 cent discount). The further reduction to $2.44 is a quality differential reduction of 3 cents as heavier crude oils commingle with the stream.

An agreement was reached between the Commonwealth Government and representatives of private enterprise on the price structure for indigenous crude oil for the five-year period commencing 18 September 1970.

Gippsland Shelf crude oil will be priced at $2.06 per barrel f.o.b., Long Island Point, Westernport. This price is calculated as follows:

	per barrel $
Weighted average posted price as at 10 October 1968 of principal crudes imported into Australia	1.62
less weighted average discounts as at 10 October 1968	0.26
	1.36
plus weighted average overseas freights as at 10 October 1968	0.46
Wharfage and other charges as at 10 October 1968	0.07
	1.89
less a deduction for coastal freight	0.09
	1.80

To this, the quality differential of 26 cents per barrel is added giving a total of $2.06 per barrel.

Moonie crude oil on the same basis, for the five-year period will be $2.15 per barrel f.o.b. Brisbane, since the coastal freight deduction of 9 cents per barrel does not apply.

Barrow Island crude will be the basic $1.89 per barrel plus a quality differential of 32 cents, giving a total of $2.21 per barrel f.o.b. Kwinana.

The price structure of any indigenous crude will be subject to any changes in composition and quality that might occur during the course of production.

Assistance to the gold-mining industry. Assistance to the gold-mining industry by subsidy was introduced at a time of rising costs in the industry and fixed official world price for gold. Because many producers were faced with the likelihood of closing down, the Government decided to subsidise marginal producers in Australia and the Territories of Papua and New Guinea. Under the *Gold-Mining Industry Assistance Act* 1954 a producer, the value of whose gold output exceeded 50 per cent of the total value of his mine output, was eligible for assistance, subject to certain conditions, on the production of gold from 1 July 1954. The assistance scheme has been reviewed on a number of occasions since the Act was originally passed, and some liberalisations have been approved, including increases in the rates of subsidy payable authorised in amendments enacted on 22 October 1957, 22 May 1959 and 2 June 1965.

Under the Act as it now stands the subsidy payable to small producers whose annual deliveries do not exceed 500 fine oz is $6 per fine oz, irrespective of cost of production. For large producers, subject to certain provisions, the rate of subsidy payable is an amount equal to three-quarters of the excess of the average cost of production over $27 per fine oz, with a maximum amount of subsidy of $8 per fine oz. A producer whose deliveries during the year exceed 500 fine oz may elect to be treated as a small producer. In this case the subsidy rate payable per fine oz on total deliveries is $6 reduced by 1c for each fine oz by which deliveries exceed 500 fine oz. The benefit under this provision terminates when deliveries in a year reach 1,100 fine oz. Where a producer receives an amount in excess of the official price of $31.25 per fine oz as a result of sales on overseas premium markets or otherwise, the subsidy payable is, with effect from 1 July 1968, reduced by seventy-five per cent of the amount of the excess. Prior to 1 July 1968 subsidy was reduced by the full amount of the excess.

Payments under the Act apply to production until 30 June 1970. Payments under the Act commenced in March 1955, and the amounts paid to gold producers in the various States and Territories of Australia in each of the years 1964 to 1968 are shown in the table on page 1004.

The purpose of the *Gold Mines Development Assistance Act* 1962 was to provide assistance to gold producers in Australia and the Territories of Papua and New Guinea not receiving subsidy under the *Gold-Mining Industry Assistance Act* 1954–1962, in order to increase the rate of their development work and so to add to their proved reserves of gold-bearing minerals. With the liberalisation of the Gold-Mining Industry Assistance Act from 1 July 1965, the Commonwealth Government decided not to extend the development assistance legislation, which, accordingly, lapsed on 30 June 1965.

Assistance to the copper mining industry. After a Tariff Board investigation, assistance was accorded to the industry in 1958, partly by import duty and partly by bounty. The assistance was continued until 31 December 1965. However, because of the unsettled conditions in the industry at this time, it was decided to defer a Tariff Board Inquiry and to continue the existing bounty assistance until 31 December 1966 unless an earlier date of cessation was proclaimed. Under the *Copper Bounty Act* 1958–1966 bounty was payable, subject to specified conditions, on refined copper sold for use in Australia. The rate of bounty was $70 per ton when the overseas price, as determined by the Minister for Customs and Excise, was $580 (£Stg232) or less. When the overseas price rose above $580, the bounty fell by the same extent, so that no bounty was payable when the overseas price was $650 (£Stg260) or more. The Act lapsed on 31 December 1966. Payments under the Act in each of the years 1964 to 1966 are shown on page 1004. The import duty continues in operation, and is imposed on imports of copper when the overseas price falls below $580 a ton, to the extent of $1 for each $1 that the price falls below $580. Including freight and other charges, the landed cost of imported copper is thus expected not to fall below $610 a ton.

Assistance to producers of sulphuric acid and iron pyrites. Following recommendations of the Tariff Board, the *Sulphuric Acid Bounty Act* 1954 was extended for a period of five years from 1 July 1960. Arising from these same recommendations, the *Pyrites Bounty Act* 1960 was enacted on 15 December 1960 to be operative for a period of four and a half years from 1 January 1961. The Acts provide for bounties to be paid, subject to specified conditions, on sulphuric acid produced from prescribed materials of Australian origin and to producers of iron pyrites. In June 1965 it was announced that assistance under these Acts would continue until 31 December 1965. Both of these Acts have now been extended by legislation to 30 June 1969. Payments under the above Acts in each of the years 1964 to 1968 are shown in the table on page 1004.

Payments to producers of phosphate fertilisers. The *Phosphate Fertilizers Bounty Act* 1963–1968 provides for a bounty to be paid on superphosphate and ammoniated phosphate fertilisers manufactured and sold for use in Australia on and after 14 August 1963. A recent amendment to this Act provides that approved trace elements, compounds or substances, when added to superphosphate, shall be deemed to be superphosphate for purpose of bounty eligibility. The bounty is based on the fertiliser value of superphosphate as measured by its soluble content of phosphorus pentoxide. A standard grade of superphosphate containing 20 per cent, plus or minus 0.5 per cent, soluble content of phosphorus pentoxide qualifies for the full bounty of $8 per ton. When the phosphorus pentoxide content of the superphosphate is less than 19.5 per cent or above 20.5 per cent, bounty is payable at the rate of $40 for each ton of contained phosphorus pentoxide. Bounty in respect of ammonium phosphate is payable at the rate of $40 for each ton of the phosphorus pentoxide content of the ammonium phosphate. In addition to standard grade superphosphate, 'double' and 'triple' superphosphates are produced in Australia and bounty on these products is payable in accordance with the phosphorus pentoxide content. The intention of this Act is to assist consumers of superphosphate (primary producers), to this end the benefits of bounty are required to be passed on to the end user of the bountiable product. The Act is due to expire on 31 October 1971. Payments under the above Act in each of the years 1964 to 1968 are shown in the following table.

COMMONWEALTH GOVERNMENT PAYMENTS TO THE MINERAL INDUSTRY AUSTRALIA, 1964 TO 1968

($)

Year	*Petroleum exploration* (a)	*Gold mining* (b)	*Copper mining* (c)	*Pyrites mining* (d)	*Sulphuric acid production* (e)	*Phosphate fertiliser production* (f)
1964	9,121,910	1,382,124	1,065,782	1,320,668	2,046,542	22,772,978
1965	10,412,842	1,984,966	5,262	1,113,964	2,138,914	22,604,562
1966	10,154,169	3,784,241	1,314	288,319	1,397,679	25,817,516
1967	10,326,587	3,858,763	. .	45,714	1,382,485	25,543,785
1968	13,805,484	2,817,453	. .	. .	1,279,260	24,906,817

(a) *Petroleum Search Subsidy Act* 1959–1967. (b) *Gold-Mining Industry Assistance Act* 1954–1966 and *Gold Mines Development Assistance Act* 1962 (expired 30 June 1965). (c) *Copper Bounty Act* 1958–1966. (d) *Pyrites Bounty Act* 1960–1965. (e) *Sulphuric Acid Bounty Act* 1954–1966. (f) *Phosphate Fertilizers Bounty Act* 1963–1966.

Bureau of Mineral Resources, Geology and Geophysics. The functions of the Bureau of Mineral Resources, Geology and Geophysics are to explore, investigate and encourage the development of mineral deposits; to survey and assess the mineral resources of the Commonwealth and its Territories and to initiate and investigate proposals for their development; to interpret the results of completed surveys and recommend ways of remedying or meeting mineral deficiencies and to advise on all aspects of the mineral economy of Australia, including the best utilisation of mineral resources in the national interest; to carry out geological and geophysical surveys and investigations and advise on all aspects of applied geology and geophysics.

The Bureau comprises five branches under the Director: Operations, Mineral Resources, Geological, Geophysical, and Petroleum Exploration. The Operations Branch consists of three sections, Planning and Co-ordination, Publications and Information, and Administrative. It carries out central office functions, including planning and control of programme, assessment of results, co-ordination of activities, liaison, and distribution of information. The Mineral Resources Branch comprises the sections Mineral Economics, Mining Engineering, and Petroleum Technology, and is concerned largely with those aspects of the Bureau's work which involve studies of the mineral industry as a whole, and the preparation of advice and reviews for the Government, industry and the public. The Geological and Geophysical Branches are responsible for the principal field activities of the Bureau, and the operation of observatories; while the Petroleum Exploration Branch is concerned with the administration of the *Petroleum Search Subsidy Act* 1959–1967 and is also engaged in the assessment of sedimentary basins in Australia and its Territories. The establishment of the Bureau is 622 officers, of whom 308 are professional. The budget for the financial year 1967–68 was $18.0 million, of which $11.8 million was provided for payment under the *Petroleum Search Subsidy Act* 1959–1967.

The Bureau maintains laboratories in Canberra and Darwin which are engaged on geochemical, geochronological and petroleum technological studies and basic research into the design and testing of geophysical equipment. The Bureau also maintains a vulcanological observatory at Rabaul and geophysical observatories at Melbourne, Toolangi, Mundaring, Darwin, Port Moresby, Mawson and Wilkes (Antarctica), and Macquarie Island. The geophysical observatories are engaged in magnetic, ionospheric, and seismic investigations and are base stations for field operations.

Commonwealth Scientific and Industrial Research Organization. The activities of this body with respect to the mineral industry are discussed on page 1007 under Research.

State Government assistance

In addition to free assays and determinations of rocks and minerals carried out for prospectors by the Mines Departments of the States and Territories, technical officers of these departments provide advice to the mining and allied industries where required, carry out field examinations of mining prospects, advise on exploration and development, select sites for water supply, and in general give a free technical service to the mining industry.

New South Wales. State aid to assist metalliferous mining may consist of grants to assist the prospecting and or mining for gold and minerals, and for the purchase, removal and installation of mining plant or equipment. A quantity of mechanical equipment is also available in several localities for hire at reasonable rentals to prospectors and small mine operators, and district inspectors have geiger counters and scheelite detectors which are loaned to approved persons. In the year 1967–68 $530,000 was made available for exploration work carried out by the Department and to give financial assistance to exploration groups and prospectors.

Victoria. Loans may be granted to assist prospecting and development or the purchase of machinery for gold mining. The Mines Department has stamp batteries in different parts of the State to crush ore for prospectors at nominal rates. Small mining companies may avail themselves of these facilities. Drilling with diamond, rotary and percussion drills is carried out by the Mines Department for mining companies and for general mineral exploration. The production of 1 : 63,630 and 1 : 250,000 series geological maps of the State is continuing and three quarters of the State is now covered by provisional 1 : 250,000 maps. Memoirs and Bulletins are being published regularly on specific regional geology and economic studies. Mineral Resources surveys for extractive industry materials, radioactive minerals and base metal ores are currently in progress. In addition a continual assessment is being made on the work carried out by Mineral Exploration Companies to ensure that a high standard of mineral search is maintained.

Detailed sedimentary basin studies are continuing in the Otway, Gippsland and Murray Basins to elucidate the stratigraphy and structure and evaluate the economic potential. The survey of the State's groundwater resources is now well advanced and a large amount of data is now compiled. In conjunction with this survey the development of provisional town supplies from groundwater sources is being investigated.

Queensland. Various forms of assistance to mining are made available by the Queensland Department of Mines. Grants are made from the Consolidated Revenue Fund for use on construction and maintenance of roads in mining areas. Advances are made from the Gold Mining Encouragement Fund for mining development work. This assistance is restricted to gold mines, and advances are repayable from proceeds of the mine, if any. From the Assistance to Metalliferous Mining Fund, plant such as jackhammers, compressors and pumps is purchased and maintained. Such plant is made available on hire, the rental payments being credited back to the fund. Prospecting assistance is made available in approved cases, the rates being $5 a week for a single man and $7 a week for a married man with dependants. This is not repayable. From the Advances to Mining Fund, assistance by way of subsidy is advanced for mine development. This is repayable from proceeds of the mine. The department also maintains a treatment works for tin ores, etc. at Irvinebank, an assay office at Cloncurry and diamond-drilling plants in several parts of the State. The Venus State battery at Charters Towers is available for the treatment of gold-bearing ores.

South Australia. The Department of Mines provides the following services and facilities to the mineral industry: (i) hire of drilling plant and mining equipment, drilling and testing of mineral deposits, financial assistance in approved cases for prospecting and mining development, development of sub-surface water supplies for farming, pastoral, irrigation, and mining purposes; (ii) geological examination of mineral deposits, water supply, dam foundation and drainage problems, guidance on mining legislation, and publication and issue of geological bulletins and maps. It also provides, through the Australian Mineral Development Laboratories, chemical and metallurgical and analytical and assay investigation, testing and treatment of ores and minerals, and petrographic, mineragraphic and radiometric determinations. Pilot scale metallurgical and chemical treatment plants are maintained and operated for the development of mineral extraction processes.

Western Australia. Prospectors receive assistance of either $15 or $17.50 a week according to the prospecting locality. North of the 26th parallel and within a defined area south of this lying largely outside the agricultural areas assistance is given to the extent of $17.50 a week. In the remainder of the State prospectors receive $15 a week. Provision is also made for the supply of some tools required for prospecting. There are twenty State batteries operating intermittently throughout the goldfields for the treatment of ore from prospectors and small mine-owners at a nominal charge. A cartage subsidy is also granted to such operators sending ore to State batteries for treatment. Provision is made for loans to mine-owners who require assistance to develop mines. The Government also has a drilling scheme, financing mine-owners on a $1 for $1 basis.

Tasmania. The Department of Mines provides financial assistance to mining lessees for the purchase of plant and machinery, for sinking, repairing or de-watering of shafts, for construction of dams and water races, for testing and proving a deposit of any mining product, for developmental work, and for diamond and other types of drilling. The Department has available for hire percussion and diamond drills for exploration, as well as a complete plant for small shaft sinking and tunnelling. Other assistance is rendered to the industry in the form of geological and engineering advice, through ore-dressing research into metallurgical recoveries, and the selection and design of treatment plant.

Northern Territory. To encourage the development of the mining industry the Northern Territory Administration operates two batteries for the treatment of miners' ores. The batteries are at Tennant Creek and at Mount Wells near Burrundie. The Tennant Creek battery is currently cyaniding the gold in accumulated tailings while the Mount Wells battery is crushing parcels of tin ores and small quantities of gold, lead and copper ores. The crushing charges are subsidised by government grants. In addition, the Administration provides cartage subsidies and financial advances to encourage miners to carry out mining operations. Assistance is also given to the industry by drilling encouraging prospects. Roads and water supply services are provided and maintained for mines under active development throughout the Territory.

Research

Research investigations into problems of mining, ore-search, ore-dressing and metallurgy are conducted by Governmental bodies, by universities, by private enterprise, and by combined efforts of these bodies. A summary of their functions follows.

Australian Atomic Energy Commission

The Australian Atomic Energy Commission conducts research at its laboratories at Lucas Heights in Sydney on the development of nuclear power, including research on nuclear materials and on metals and ceramics used for nuclear power. Research conducted by the Commission is discussed in detail in the chapter Education, Cultural Activities and Research.

Australian Mineral Development Laboratories

Contract research and technical consulting for the mineral and associated industries is undertaken by The Australian Mineral Development Laboratories (Amdel), at Adelaide. This organisation is sponsored by the South Australian Government, the Commonwealth Government and the Australian Mineral Industries Research Association (*see* Research by private enterprise, page 1007). The laboratories have sections dealing with mineralogy, petrology, analytical chemistry, chemical and metallurgical engineering, ceramics, materials technology and operations research.

The Baas Becking Geobiological Research Laboratory

In 1965 the Baas Becking Geobiological Research Laboratory was established in the Bureau of Mineral Resources Building in Canberra, under the joint sponsorship of the Commonwealth Scientific and Industrial Research Organization, the Bureau of Mineral Resources, and the Australian Mineral Industries Research Association (*see* Research by private enterprise, page 1007). The broad objective of the research work is to investigate the biological and chemical processes associated with the formation of mineral deposits of the stratiform type.

Initial emphasis is being placed on investigations to establish the relationship of biological factors to the natural physico-chemical environment with particular reference to the possible role of these factors in the formation and transformation of sulphide minerals. Investigations will include the response of micro-organisms to heavy metals; biochemistry and physiology of oxidative and reductive sulphur transformations; role of organisms in the concentration of mineral elements; physico-chemistry of low-temperature mineral synthesis; mobility of sulphides under the influence of temperature and pressure and the interaction of mineral types; and biological leaching of low-grade sulphide minerals.

The laboratory is named after the late Dr L. G. M. Baas Becking, who was one of the first to recognise the possibility that biological, in particular microbial, activity may play an important part in the genesis of sulphide ores. Dr Baas Becking carried out research in this field while on loan to the Bureau of Mineral Resources from the C.S.I.R.O.

Bureau of Mineral Resources, Geology and Geophysics

Mineral research by the Bureau of Mineral Resources is concerned with basic problems of mineral emplacement. Special studies are undertaken of: the sedimentary environment of potentially oil-bearing rocks; the genesis of continental and marine phosphate; the fundamental chemistry of metallic ore deposits; the structural, chemical, and stratigraphic contents of ore deposits; and geophysical interpretation by means of model testing.

For details of the functions of the Bureau of Mineral Resources, Geology and Geophysics, *see* page 1004.

Commonwealth Scientific and Industrial Research Organization

Research for the mineral industry by the Commonwealth Scientific and Industrial Research Organization is undertaken mainly in the Divisions of Applied Mineralogy and Mineral Chemistry and in the Ore Dressing Investigations Laboratory. Work of a more specifically chemical engineering nature is undertaken in the Division of Chemical Engineering. All of these groups have laboratories in Melbourne. In addition, the Division of Applied Mineralogy has laboratories in Perth and Sydney, and the Division of Mineral Chemistry has a laboratory in Sydney.

The research programme of the Division of Applied Mineralogy is concerned mainly with the production and utilisation of natural and synthetic mineral products. Research is undertaken on cement and concrete, industrial refractories, engineering ceramics, clays, mineral-organic complexes, fillers, foundry materials, and the geochemistry of some economic minerals. The Division of Mineral Chemistry is undertaking research aimed at a more thorough evaluation of Australian minerals and their better utilisation through chemical, electrochemical and metallurgical processes. It includes studies on mineral exploration techniques, chemical upgrading of minerals, and the production of metals, and investigations on processes with possibilities for application in the exploitation of minerals. Work is continuing on the evaluation of coals from all the significant deposits in Australia, and on the technical problems of coal combustion in large power stations. In the Division of Chemical Engineering, projects of particular interest to the mineral industry include studies on the dynamics and automatic control of mineral processing operations such as grinding, classifying and flotation, fluidised-bed techniques, high-temperature extraction metallurgy and metal refining. The Ore Dressing Investigations laboratory undertakes research on problems arising in the processing of particular Australian ores. In addition, it is collaborating with interested firms in long-term studies on the chemistry of flotation pulps and the assessment of the resistance of ores to grinding.

All C.S.I.R.O. groups taking part in mineral research are in close contact with industry. Several projects are being developed by collaboration between C.S.I.R.O. and Australian firms and a significant proportion of the Organization's mineral research is now carried on with funds provided by industry. A committee set up by the Advisory Council of C.S.I.R.O. is continuing to examine and advise on research needs in the mining and processing industries in the changing environment.

National Coal Research Advisory Committee

The functions of the National Coal Research Advisory Committee, which began operating in January 1965, are to report on all programmes of research into coal winning, beneficiation and utilisation in Australia, as well as developments in these fields overseas; and to advise the contributing Governments and industry as to the disposition of funds made available for such research. The Commonwealth matches additional funds made available by State Governments and by the coal producing and consuming industries. In the first four years of operation of the scheme additional funds of $520,000 have been made available in each year for increased coal utilisation research, bringing total expenditure on coal research in Australia to approximately $3.0 million annually. In association with the setting up of the National Coal Research Advisory Committee, a new company, the Australian Coal Industry Research Laboratories Limited, was formed in late 1965 to take over the research and industrial service activities of the Australian Coal Association (Research) Limited, which was financed largely by the coal producing industry. Additional funds have been made available to this company from the coal producing and consuming industries and from State and Commonwealth Governments to permit the expansion of the work of the former Australian Coal Association (Research) Limited initially in the particular direction of coal utilisation research, latterly in the direction of coal winning and beneficiation research. The constitution of the Advisory Committee and the establishment of the laboratories have brought into effect the major recommendations of the Coal Utilisation Research Advisory Committee which tabled its Report to Parliament in 1962.

University Research

The various universities in Australia carry out research into various aspects of the mineral industry such as geology, ore mineralogy and genesis, mining techniques, mineral processing, extractive metallurgy, and materials and metals technology.

Research by private enterprise

Most large mining and smelting companies have laboratories dealing with their own individual immediate problems. Private industry has formed the Australian Mineral Industries Research Association, which is composed of fifty members representing a large proportion of the mining, metallurgical and related companies operating in Australia at present. It was set up in 1959, chiefly to represent private industry in the management of the Australian Mineral Development Laboratories, but the Association now finances other research work into geology, mining and ore-dressing at Universities, C.S.I.R.O. and elsewhere. Expenditure for the year 1967–68 was $106,024.

In addition, the Association provided $50,000 to the Australian Mineral Development Laboratories toward the cost of a new building (the first of four such payments) and an advance of $20,000 to underwrite the formation of International Technical Services Limited. The latter is a new non-profit consulting company jointly owned by the Association and Battelle Memorial Institute, Columbus, U.S.A. and associated with the Australian Mineral Development Laboratories.

International relations

Because Australia is a large supplier of certain minerals to the rest of the world and because the welfare of the domestic industry depends to a large extent on the maintenance of a high level of exports, international relations are of considerable importance to the industry, and the Commonwealth Government takes an active role in international consultations and discussions relating to minerals. The most important international commitments are discussed below.

International Tin Agreement

The First International Tin Agreement (of the post-war period) was in operation for five years from 1 July 1956 to 30 June 1961. This Agreement was subsequently replaced by the Second International Tin Agreement, which came into force provisionally on 1 July 1961 and definitively on 21 February 1962.

This Agreement was for a period of five years and had the following objectives:

(*a*) to prevent or alleviate widespread unemployment or under-employment and other serious difficulties likely to arise from maladjustments between the supply and the demand for tin;

(*b*) to prevent excessive fluctuations in the price of tin and to achieve a reasonable degree of stability of price;

(*c*) to ensure adequate supplies of tin at prices which are fair to consumers and provide a reasonable return to producers; and

(*d*) to provide a framework for the consideration of measures to promote the progressively more economic production of tin, while protecting deposits of tin from unnecessary waste or premature abandonment, thus facilitating expansion in world consumption of tin; and to keep under review the long-term need for the development of new deposits of tin.

The Third International Tin Agreement, which came into force provisionally on 1 July 1966 and definitively on 21 March 1967, contains several additional objectives:

(*a*) to ensure conditions which will help achieve a dynamic and rising rate of production of tin on the basis of a remunerative return to producers, which will help secure an adequate supply at prices fair to consumers and which will help provide a long-term equilibrium between production and consumption;

(*b*) in the event of a serious shortage of supplies of tin occurring or being expected to occur, to take steps to secure an increase in the production of tin and a fair distribution of tin metal at equitable prices.

Although the framework of the Third Agreement is basically that of the Second, objectives have been broadened in line with the principles of the United Nations Conference on Trade and Development (UNCTAD) and, as such, emphasise the need for expansion of export earnings in the developing countries. Thus the emphasis has been shifted from surplus production and export controls inherent in the Second Agreement to one of increased production in the new Agreement.

The Agreement is operated by the International Tin Council, which is made up of the following Governments: Australia, Austria, Belgium, Bolivia, Canada, Czechoslovakia, Democratic Republic of the Congo, Denmark, France, India, Indonesia, Italy, Japan, Korea, Malaysia, Mexico, Netherlands, Federation of Nigeria, Spain, Thailand, Turkey, United Kingdom. Member Governments participate as producing or consuming countries. The producing countries hold a total of 1,000 votes, distributed so that each country receives five initial votes and an additional number corresponding to its percentage as laid down by the Agreement. The consuming countries hold a total of 1,000 votes also distributed so that each country receives five initial votes and an additional number proportionate to tonnages. The allocation of votes in each category is periodically reviewed.

The International Tin Agreement establishes floor and ceiling prices for tin and, by the medium of a buffer stock and remedial trading on the London Metal Exchange, aims at confining the price within these limits. The buffer stock was established with contributions from producing countries, equivalent to 10,000 tons of metal, wholly made in cash at £stg1,000 a ton; a further £10 million remains on call from the producer members and a standby-credit facility of £10 million from a consortium of banks. The original buffer stock price range under the Third Agreement was: ceiling £1,400—must sell; £1,300 to £1,400—may sell; £1,200 to £1,300—no action; £1,100 to £1,200—may buy; floor £1,100—must buy. However, following devaluation of sterling, the buffer stock price range was adjusted to the following limits: £1,630—must sell; £1,515 to £1,630—may sell; £1,400 to £1,515—no action; £1,280 to £1,400—may buy; £1,280—must buy.

On 18 September 1968 the International Tin Council declared the period 19 September 1968 to 31 December 1968 to be a period of export control. The total permissible export amount during that period for the six producing members in the agreement, Bolivia, Congo D.R., Indonesia, Malaysia, Nigeria, and Thailand, was 42,950 long tons. The quotas established for the producer members represented a moderate cut, in effect some 4 per cent on reports in the second quarter of 1968. The Council also addressed an invitation to the Australian Government, asking that Australia limit its exports of tin to the same degree and for the same period as the producer members of the Agreement. The Australian Government introduced export controls on tin and tin concentrates as from 6 December 1968.

International Lead-Zinc Study Group

With the cessation of stockpile buying of lead and zinc by the United States Government in 1958, world producers were faced with the prospect of a serious imbalance between world supply and demand for these metals. To meet this problem a series of meetings of interested governments was held, at which Australia was represented. These meetings culminated in the formation of the International Lead-Zinc Study Group which was established in January 1960. The Study Group comprises the following Governments: Algeria, Australia, Austria, Belgium, Bulgaria, Canada, Czechoslovakia, Denmark, Finland, France, the Federal Republic of Germany, Hungary, India, Italy, Japan, Mexico, Morocco, the Netherlands, Norway, Peru, Poland, the Republic of South Africa, Spain, Sweden, Tunisia, the Union of Soviet Socialist Republics, the United Kingdom of Great Britain and Northern Ireland, the United States of America, Yugoslavia Zambia. The Group provides opportunities for inter-governmental consultations on international trade in lead and zinc and for studies of the world situation in lead and zinc having regard expecially to the desirability of providing continuous accurate information regarding the supply and demand position and its probable development.

MINERAL INDUSTRY STATISTICS

Statistics presented in this chapter refer mainly to mining and quarrying, mineral exploration, and overseas participation in Australian mining industry. Data relating to mineral processing and treatment activities are included where appropriate to present a more complete picture of the place of minerals in the Australian economy.

Mining and quarrying

Definition

The mining and quarrying industry is defined for statistical purposes as including all mining and quarrying and the recovery of minerals from ore dumps, tailings, etc., and ore-dressing and elementary smelting of gold and miscellaneous treatment of non-metallic minerals where these operations are carried out in an associated plant at or near the mine. However, establishments primarily engaged in smelting and or refining (including the smelting and refining sections of the large plants operated at Mount Morgan and Mount Isa in Queensland and at Mount Lyell in Tasmania) are excluded from the statistical definition of the mining industry and are classified to the manufacturing industry.

Coverage

The statistical coverage of establishments engaged in mining is considered to be satisfactory. However, coverage of establishments engaged in the quarrying of construction materials is incomplete in most States. This deficiency is due primarily to the inherent difficulty of obtaining complete lists of quarries (including those operated by government authorities), many of which operate intermittently and in different locations. There is difficulty also in obtaining satisfactory returns from quarries operated in conjunction with some other activity, e.g. roadmaking, brick-works, etc., and quarries operated in conjunction with large construction projects, such as the Snowy Mountains Scheme, are excluded from these statistics. In some States there have been deficiencies also in the collection of data for certain non-metal (excluding fuel) mining industries, mainly because these are outside the fields normally under the administrative control of Mines Departments. Products chiefly affected are clays, loam and silica.

Sources of statistics

Mining industry data (such as employment, costs, value of output, etc.) have been obtained annually since 1952 from the Mining and Quarrying Census. This Census is carried out in collaboration with the several Mines Departments and involves the uniform collection of particulars from all establishments employing on the average four or more persons during the period worked by the mine. A representative specimen collection form is included in the bulletin *Non-Rural Primary*

Industries, No. 3, 1964–65. For smaller mines either simplified census returns covering number of persons employed and value of output are collected, or these particulars are compiled from data made available by the Mines Departments. Oil search operations are excluded from the annual census, but the Bureau of Mineral Resources conducts an annual survey of these activities.

Mineral production statistics contained in this chapter consist, in the main, of data from the annual census and official statistics of the Mines Departments of the several States and of the Northern Territory Mines Branch. The particulars shown have been compiled as far as practicable on the standardised basis which has been used in Australia since 1950, and this presentation has involved some re-arrangement of official statistics published by the Mines Departments in some States. These statistics have been supplemented, as necessary, by data obtained from the Statisticians of the several States, the Bureau of Mineral Resources, Geology and Geophysics, the Joint Coal Board, and from several other sources.

Classification of mining and quarrying industry

The mining and quarrying industry is classified into four major groups, namely metal mining, fuel mining, non-metal mining (excluding fuel), and construction material quarrying. Mining and quarrying establishments are classified to these groups and to sub-divisions of these groups on the basis of the product or products of the establishments. This method of classification is straightforward for those establishments which produce only one product, but for mines and quarries which produce more than one product classification is not as simple a matter. Such establishments are classified according to the most important mineral produced in terms of value. Thus a mine producing, say, both tin and tungsten minerals would be classified as a tin mine if tin were the more important product by value, and as a tungsten mine if tungsten were the dominant product. There is, however, one important exception to this rule in that the mining establishment at Mount Isa is classified to the silver-lead-zinc sector rather than to the copper-gold sector.

For mines and quarries which produce more than one product it is not possible to apportion particulars of operations (such as employment, salaries and wages paid, costs) to the minerals produced. In practice, then, these data are recorded only as a total for each mine, and the mine is classified to an industry sector as outlined above.

Statistics relating to the structure of the industry, employment, production costs, value of additions and replacements to fixed assets, and value of output and production are given below and in the following pages.

Number of mines and quarries

The following tables show the number of mines and quarries which operated in each State and Territory in 1967 and in Australia for the years 1963 to 1967.

NUMBER OF MINES AND QUARRIES: STATES AND TERRITORIES, 1967

Industry	*N.S.W.*	*Vic.*	*Qld*	*S.A*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Metal mining—									
Gold	17	10	27	..	105	1	11	..	171
Silver-lead-zinc	17	..	8	1	4	1	1	..	32
Copper-gold	13	..	136	5	10	1	9	..	174
Tin	52	7	269	..	19	32	14	..	393
Mineral sands	14	..	7	..	4	..	..	..	25
Iron	..	..	..	1	8	1	1	..	11
Other metal	27	3	21	1	8	3	6	..	69
Total, metal mining	*140*	*20*	*468*	*8*	*158*	*39*	*42*	..	*875*
Fuel mining—									
Black coal—									
Underground	84	1	46	..	2	3	..	..	136
Opencut	8	..	4	1	1	..	..	..	14
Total, black coal	92	1	50	1	3	3	..	..	150
Brown coal	..	5	..	..	..	..	..	..	5
Other fuel	..	1	3	..	1	..	..	..	5
Total, fuel mining	*92*	*7*	*53*	*1*	*4*	*3*	..	..	*160*
Non-metal (excluding fuel) mining(*a*)	436	128	142	107	60	26	..	..	1,098
Total, all mining	*867*	*155*	*663*	*116*	*222*	*68*	*42*	..	*2,133*
Construction material quarrying(*a*)	342	403	64	259	58	109	32	13	1,280
Total, all mining and quarrying	**1,209**	**558**	**727**	**375**	**280**	**177**	**74**	**13**	**3,413**

(*a*) Incomplete, owing to difficulties of coverage. *See* Coverage, page 1009.

NUMBER OF MINES AND QUARRIES: AUSTRALIA, 1963 TO 1967

Industry	*1963*	*1964*	*1965*	*1966*	*1967*
Metal mining—					
Gold	257	246	193	179	171
Silver-lead-zinc	13	20	32	30	32
Copper-gold	98	86	75	124	174
Tin	300	371	391	363	393
Mineral sands	18	20	21	23	25
Iron	(*a*)	(*a*)	(*a*)	11	11
Other metal	62	56	53	52	69
Total, metal mining	*748*	*799*	*765*	*782*	*875*
Fuel mining—					
Black coal	185	179	168	158	150
Brown coal	6	7	6	5	5
Other fuel	2	3	3	4	5
Total, fuel mining	*193*	*189*	*177*	*167*	*160*
Non-metal (excluding fuel) mining(*b*)	792	756	802	973	1,098
Total, all mining	*1,733*	*1,744*	*1,744*	*1,922*	*2,313*
Construction material quarrying(*b*)	1,044	1,148	1,234	1,276	1,280
Total, all mining and quarrying	**2,777**	**2,892**	**2,978**	**3,198**	**3,413**

(*a*) Included in Other metal. (*b*) Incomplete. *See* Coverage, page 1009.

Employment in mining and quarrying

Persons engaged. Statistics of persons employed in the mining and quarrying industry are derived mainly from the annual census of that industry. Data on the work force employed in the industry are also obtained from the population censuses of Australia. The population census figure for mining and quarrying includes a number of persons excluded from the mining and quarrying census employment figure, e.g. persons engaged in exploration activities, prospectors, head office employees, etc. The number of persons whose industry statements were classified to 'mining and quarrying' at the population census of 30 June 1966 was 56,343 out of a total of 512,994 for all primary industries and 4,856,455 in the total work force. For further information *see* the chapter Employment and Unemployment and 1966 Census Bulletin No. 9.6, *Population, By Industry and Occupational Status, Australia.*

The following two tables are derived from mining census data and show the average numbers engaged in the various mining industries in each State or Territory in 1967 and in Australia for the years 1963 to 1967. The figures show the average number of persons employed during the whole year, including working proprietors.

MINING AND QUARRYING: EMPLOYMENT(*a*) STATES AND TERRITORIES, 1967

Industry	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Metal mining—									
Gold	8	111	(*b*)	..	3,683	(*b*)	(*b*)	..	4,074
Silver-lead-zinc	4,705	..	5,205	2	(*b*)	(*b*)	90	..	9,703
Copper-gold	315	..		4	(*b*)	(*b*)	408	..	2,712
Tin	289	30	530	..	226	647	26	..	1,748
Mineral sands	1,597	..	593	..	353	..	..	..	2,543
Iron	..	..	..	313	999	(*b*)	242	..	1,609
Other metal	42	8	(*b*)	90	389	(*b*)		..	1,299
Total, metal mining	*6,956*	*149*	*6,769*	*409*	*5,782*	*2,691*	*932*	..	*23,688*
Fuel mining—									
Black coal—									
Underground	11,608	(*c*)122	(*b*)	..	(*b*)	61	..	..	(*c*)14,385
Opencut	221	..	(*b*)	263	(*b*)	..	..	..	1,063
Total, black coal	11,829	122	(*c*)2,265	263	(*c*)908	61	..	..	(*c*)15,448
Brown coal	..	1,677	..	..	..	..	..	..	1,677
Total, fuel mining	*11,829*	*1,799*	*2,265*	*263*	*908*	*61*	..	..	*17,125*
Non-metal (excluding fuel) mining(*d*)	1,372	331	408	442	169	81	..	..	2,803
Total, all mining	*20,157*	*2,279*	*9,442*	*1,114*	*6,859*	*2,833*	*932*	..	*43,616*
Construction material quarrying(*d*)	1,872	1,947	479	848	313	235	74	80	5,848
Total, all mining and quarrying	**22,029**	**4,226**	**9,921**	**1,962**	**7,172**	**3,068**	**1,006**	**80**	**49,464**

(*a*) Average employment during whole year, including working proprietors. (*b*) Not available for publication. (*c*) Includes other fuel mining. (*d*) Incomplete, owing to difficulties of coverage. *See* Coverage, page 1009.

MINING AND QUARRYING: EMPLOYMENT(*a*), AUSTRALIA, 1963 TO 1967

Industry	*1963*	*1964*	*1965*	*1966*	*1967*
Metal mining—					
Gold	5,287	4,753	4,525	4,447	4,074
Silver-lead-zinc	7,946	7,811	7,269	8,681	9,703
Copper-gold	2,288	2,341	2,312	2,554	2,712
Tin	1,116	1,191	1,402	1,550	1,748
Mineral sands	1,565	1,734	2,000	2,434	2,543
Iron	(*b*)	(*b*)	(*b*)	1,323	1,609
Other metal	1,168	1,348	2,251	972	1,299
Total, metal mining	*19,370*	*19,178*	*19,759*	*21,961*	*23,688*
Fuel mining—					
Black coal(*c*)	15,636	15,364	15,391	15,169	15,448
Brown coal	1,613	1,673	1,710	1,760	1,677
Total, fuel mining	*17,249*	*17,037*	*17,101*	*16,929*	*17,125*
Non-metal (excluding fuel) mining(*d*)	2,823	2,783	2,795	2,930	2,803
Total, all mining	*39,442*	*38,998*	*39,655*	*41,820*	*43,616*
Construction material quarrying(*d*)	5,406	5,814	6,217	5,957	5,848
Total, all mining and quarrying	**44,848**	**44,812**	**45,872**	**47,777**	**49,464**

(*a*) Average employment during whole year including working proprietors. (*b*) Included in Other metal. (*c*) Includes other fuel mining. (*d*) Incomplete, *see* Coverage, page 1009.

Size classification of mines and quarries. The following table shows the distribution of the total number of mines into various size groups according to the average number of persons employed *during the period worked* by each mine in 1967.

NUMBER OF MINES AND QUARRIES AND PERSONS EMPLOYED, BY AVERAGE NUMBER EMPLOYED: STATES AND TERRITORIES, 1967

Mines and quarries employing on the average(a)—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T. and A.C.T.*	*Aust.*
Less than 4 persons—								
Establishments	912	381	581	284	179	134	69	2,540
Persons	1,691	614	905	498	448	225	99	4,480
From 4 to 20 persons—								
Establishments	184	146	81	77	62	30	11	591
Persons	1,460	1,160	804	708	450	217	120	4,919
From 21 to 200 persons—								
Establishments	86	30	60	12	30	8	6	232
Persons	7,183	1,251	3,092	590	2,400	536	504	15,556
More than 200 persons—								
Establishments	27	1	4	2	9	5	1	49
Persons	12,838	1,570	5,613	576	4,234	2,300	382	27,513
Total—								
Establishments	**1,209**	**558**	**727**	**375**	**280**	**177**	**87**	**3,413**
Persons	**23,172**	**4,595**	**10,414**	**2,372**	**7,532**	**3,278**	**1,105**	**52,468**

(*a*) Average during period worked. Includes working proprietors.

Accidents in mining. Particulars of numbers of persons killed and injured in accidents in mines and associated treatment plants are recorded by State Mines Departments. Numbers injured are not reported on a uniform basis in all States, as varying criteria are used in determining what constitutes injury. In 1967, 35 persons were recorded as killed and 1,145 as injured in mining (excluding quarrying) accidents. Recorded deaths and injuries in that year in black coal mines were 12 and 339, silver-lead-zinc mines 5 and 252, gold mines 5 and 242. In mineral sands mining there were no recorded deaths and 42 injuries reported. Persons killed and injured in the construction material quarrying industry numbered 4 and 138 respectively in 1967.

Salaries and wages paid

Salaries and wages paid in the mining and quarrying industries in Australia during each year 1963 to 1967 are shown in the following table. Information regarding rates of wages paid in the mining industry is shown in the chapter Labour, Wages and Prices (page 265) and also in the *Labour Report*.

MINING AND QUARRYING: SALARIES AND WAGES PAID(*a*), AUSTRALIA
1963 TO 1967
($'000)

Industry	*1963*	*1964*	*1965*	*1966*	*1967*
Metal mining—					
Gold	13,072	11,812	11,974	12,409	12,591
Silver-lead-zinc	25,678	29,948	34,397	44,651	46,711
Copper-gold	6,200	6,834	7,415	8,205	9,235
Tin	2,502	2,648	3,313	4,156	5,035
Mineral sands	4,156	4,706	5,837	7,673	8,603
Iron	(*b*)	(*b*)	(*b*)	4,917	7,529
Other metal	3,184	4,038	7,241	3,683	5,790
Total, metal mining	*54,792*	*59,986*	*70,177*	*85,696*	*95,495*
Fuel mining—					
Black coal(*c*)	49,230	52,204	55,942	60,191	65,549
Brown coal	4,634	5,144	5,503	5,672	5,662
Total, fuel mining	*53,864*	*57,348*	*61,445*	*65,863*	*71,210*
Non-metal(excluding fuel) mining(*d*)	5,764	6,248	6,388	6,821	5,570
Total, all mining	*114,420*	*123,582*	*138,010*	*158,380*	*172,275*
Construction material quarrying(*d*)	8,684	9,364	10,751	11,256	11,136
Total, all mining and quarrying	**123,104**	**132,946**	**148,761**	**169,636**	**183,411**

(*a*) Excludes mines and quarries employing less than four persons, and drawings by working proprietors; the amounts are net after deducting value of explosives sold to employees. (*b*) Included in Other metal. (*c*) Includes other fuel mining. (*d*) Incomplete. *See* Coverage, page 1009.

Power, fuel, light, and materials, etc. used

MINING AND QUARRYING: VALUE OF POWER, FUEL, LIGHT, AND OTHER MATERIALS AND STORES USED, AUSTRALIA, 1963 TO 1967
($'000)

Industry	*1963*	*1964*	*1965*	*1966*	*1967*
Metal mining—					
Gold	9,758	8,334	8,433	8,207	8,147
Silver-lead-zinc	21,590	22,688	21,009	22,265	24,923
Copper-gold	7,232	7,698	8,365	10,537	12,544
Tin	1,508	1,854	2,115	3,095	3,676
Mineral sands	5,052	5,496	6,138	7,569	7,820
Iron	(*a*)	(*a*)	(*a*)	3,923	11,564
Other metal	2,850	3,162	4,366	2,285	3,656
Total, metal mining	*47,990*	*49,234*	*50,427*	*57,883*	*72,329*
Fuel mining—					
Black coal(*b*)	27,002	29,114	31,718	35,746	41,069
Brown coal	1,478	1,532	2,108	2,082	1,968
Total, fuel mining	*28,480*	*30,648*	*33,827*	*37,828*	*43,036*
Non-metal (excluding fuel) mining(*c*)	5,534	5,342	5,720	5,641	5,209
Total, all mining	*82,004*	*85,226*	*89,974*	*101,351*	*120,574*
Construction material quarrying(*c*)	9,060	9,728	11,067	12,072	13,115
Total, all mining and quarrying	**91,064**	**94,952**	**101,041**	**113,423**	**133,689**

(*a*) Included in Other metal. (*b*) Includes other fuel mining. (*c*) Incomplete. *See* Coverage, page 1009.

Value of additions and replacements to fixed assets in mining and quarrying

MINING AND QUARRYING: VALUE OF ADDITIONS AND REPLACEMENTS TO FIXED ASSETS(*a*), AUSTRALIA, 1963 TO 1967
($'000)

Industry	*1963*	*1964*	*1965*	*1966*	*1967*
Metal mining—					
Gold	2,024	1,365	1,094	1,195	1,558
Silver-lead-zinc	14,154	20,071	10,939	12,535	14,595
Copper-gold	5,066	7,419	5,333	6,085	5,813
Tin	1,548	4,459	6,583	9,798	10,361
Mineral sands	2,436	3,592	6,729	11,103	9,674
Iron	(*b*)	(*b*)	(*b*)	36,436	20,112
Other metal	4,476	5,556	32,228	13,051	12,827
Total, metal mining	*29,702*	*42,462*	*62,906*	*90,203*	*74,939*
Fuel mining—					
Black coal(*c*)	20,668	19,952	28,695	45,442	71,506
Brown coal	6,610	5,416	6,115	5,107	5,277
Total, fuel mining	*27,278*	*25,368*	*34,810*	*50,548*	*76,783*
Non-metal (excluding fuel) mining(*d*)	1,742	3,497	2,109	3,638	8,302
Total, all mining	*58,722*	*71,327*	*99,825*	*144,387*	*160,024*
Construction material quarrying(*d*)	3,898	5,867	7,303	5,273	7,640
Total, all mining and quarrying	**62,620**	**77,194**	**107,128**	**149,661**	**167,664**

(*a*) Excludes mines and quarries employing less than four persons. (*b*) Included in Other metal. (*c*) Includes other fuel mining. (*d*) Incomplete. *See* Coverage, page 1009.

Value of output and production

The following tables show particulars of value of output on an ex-mine basis (local value of production) and value of production (net value of production) for recent years. *These statistics are on an industry basis and not by product.* A more detailed reference to the value of production of mining and quarrying and other industries together with a brief explanation of terms used will be found in the chapter Miscellaneous.

Local value of mining and quarrying production. The following tables show particulars of the local value of production of mining and quarrying for 1967 and earlier years.

MINING AND QUARRYING: LOCAL VALUE OF PRODUCTION(*a*) STATES AND TERRITORIES, 1967

($'000)

Industry	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust*
Metal mining—									
Gold	4	468	(*b*)	..	21,849	(*b*)	(*b*)	..	24,688
Silver-lead-zinc	73,820	..	64,064	5	(*b*)	(*b*)	670	..	138,951
Copper-gold	7,126	..		16	(*b*)	(*b*)	7,093	..	36,883
Tin	4,269	90	4,123	..	2,314	(*b*)	(*b*)	..	15,388
Mineral sands	22,736	..	8,792	..	5,723	..	..	..	37,251
Iron	..	..	..	11,150	70,253	..	1,615	..	83,018
Other metal	255	28	(*b*)	1,437	7,561	(*b*)	6,742	..	36,625
Total, metal mining	*108,210*	*586*	*93,794*	*12,608*	*108,408*	*31,102*	*18,095*	..	*372,803*
Fuel mining—									
Black coal	126,446	251	(*b*)	3,272	(*b*)	322	..	..	160,099
Brown coal	..	20,686	..	..	..	..	..	..	20,686
Other fuel	..	..	(*b*)	..	(*b*)	..	..	..	21,286
Total, fuel mining	*126,446*	*20,937*	*32,567*	*3,272*	*18,528*	*322*	..	..	*202,071*
Non-metal (excluding fuel) mining—									
Clays(*c*)	3,260	3,183	259	622	427	118	..	..	7,869
Gypsum	204	362	..	1,498	62	..	..	..	2,126
Limestone	3,322	2,671	(*b*)	2,599	(*b*)	473	..	..	12,047
Salt	..	543	(*b*)	2,065	(*b*)	..	..	..	2,769
Other non-metal mining(*c*)	2,552		(*b*)	3,719	(*b*)	21	..	..	7,129
Total, non-metal mining	*9,338*	*6,760*	*3,446*	*10,503*	*1,282*	*611*	..	..	*31,940*
Total, all mining	*243,994*	*28,282*	*129,807*	*26,382*	*128,218*	*32,035*	*18,095*	..	*606,814*
Construction material quarrying(*c*)	31,935	29,056	5,703	14,066	6,101	2,652	1,221	1,087	91,822
Total, all mining and quarrying	275,929	57,339	135,510	40,449	134,319	34,688	19,316	1,087	698,636

(*a*) Value of output or selling value of products at the mine or quarry. (*b*) Not available for publication, included in total for Australia. (*c*) Incomplete. *See* Coverage, page 1009.

MINING AND QUARRYING: LOCAL VALUE OF PRODUCTION(*a*) STATES AND TERRITORIES, 1963 TO 1967

($'000)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T. and A.C.T.*	*Aust.*
1963	185,352	40,840	84,084	34,208	44,768	20,304	7,126	416,682
1964	233,298	44,892	97,286	38,938	45,366	25,048	7,972	492,800
1965	267,673	48,926	98,964	39,466	49,072	28,998	9,272	542,370
1966	263,751	53,156	138,483	41,954	78,918	34,561	14,328	625,152
1967	275,929	57,339	135,510	40,449	134,319	34,688	20,403	698,636

(*a*) Value of output or selling value of products at the mine or quarry.

Net value of mining and quarrying production

The following tables show particulars of the net value of production of mining and quarrying for 1967 and earlier years.

MINING AND QUARRYING: NET VALUE OF PRODUCTION(*a*)
STATES AND TERRITORIES, 1967
($'000)

Industry	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Metal mining—									
Gold	1	307	(*b*)	..	14,287	(*b*)	(*b*)	..	16,541
Silver-lead-zinc	60,831	..	50,469	3	(*b*)	(*b*)	517	..	114,028
Copper-gold	4,690	..		14	(*b*)	(*b*)	5,558	..	24,340
Tin	3,472	70	3,274	..	1,736	(*b*)	(*b*)	..	11,711
Mineral sands	18,773	..	6,088	..	..	(*b*)	..	..	29,431
Iron	..	..	..	10,364	66,954	..	7,649	..	71,454
Other metal	225	24	(*b*)			(*b*)		..	32,969
Total, metal mining	*87,993*	*401*	*75,906*	*10,382*	*87,991*	*22,416*	*15,385*	..	*300,474*
Fuel mining—									
Black coal	95,080	158	(*c*)24,824	2,706	(*c*)17,291	258	..	..	(*c*)140,317
Brown coal	..	18,718	..	..	..	..	..	..	18,718
Total, fuel mining	*95,080*	*18,876*	*24,824*	*2,706*	*17,291*	*258*	..	..	*159,035*
Non-metal (excluding fuel) mining—									
Clays(*d*)	2,943	2,924	219	566	284	110	..	..	7,046
Gypsum	161	328	..	1,337	52	..	..	..	1,878
Limestone	2,320	1,936	(*b*)	2,273	(*b*)	316	..	..	8,879
Salt	..	497	(*b*)	1,795	(*b*)	..	..	..	2,235
Other non-metal mining(*d*)	2,384		..	3,525	(*b*)	16	..	..	6,693
Total, non-metal mining	*7,808*	*5,685*	*2,373*	*9,496*	*926*	*442*	..	..	*26,730*
Total, all mining	*190,881*	*24,963*	*103,103*	*22,583*	*106,209*	*23,116*	*15,385*	..	*486,240*
Construction material quarrying(*d*)	31,935	22,419	4,336	12,011	4,058	2,082	1,031	834	78,708
Total all mining and quarrying	**222,817**	**47,382**	**107,440**	**34,595**	**110,267**	**25,197**	**16,416**	**834**	**564,947**

(*a*) Local value (i.e. value of output at mine or quarry) *less* cost of power, fuel, light and other materials and stores used; depreciation and maintenance costs have not been deducted. (*b*) Not available for publication, included in total for Australia. (*c*) Includes other fuel mining. (*d*) Incomplete. *See* Coverage, page 1009.

MINING AND QUARRYING: NET VALUE OF PRODUCTION(*a*)
STATES AND TERRITORIES, 1963 TO 1967

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T. and A.C.T.*	*Aust.*
NET VALUE OF PRODUCTION ($'000)								
1963	149,710	33,652	61,948	29,614	30,698	14,466	5,530	325,618
1964	195,980	37,056	74,406	34,068	32,162	18,174	5,998	397,846
1965	225,771	39,958	79,742	33,979	35,192	20,309	6,378	441,330
1966	215,902	43,438	115,370	36,250	63,097	25,828	11,842	511,728
1967	222,817	47,382	107,440	34,595	110,267	25,197	17,250	564,947
NET VALUE OF PRODUCTION PER HEAD OF POPULATION ($)								
1963	36.70	10.95	38.84	28.94	38.43	39.88	43.55	29.44
1964	47.31	11.82	45.73	32.38	39.36	49.61	43.72	35.27
1965	53.63	12.51	48.04	31.41	42.03	54.95	43.08	38.37
1966	50.76	13.37	68.34	32.84	73.19	69.07	74.95	43.70
1967	51.26	14.35	62.54	30.94	123.54	66.43	102.08	47.37

(*a*) Local value (i.e. value of output at mine or quarry), *less* cost of power, fuel, light, and other materials and stores used; depreciation and maintenance costs have not been deducted.

Quantities of principal minerals produced

In the preparation of Australian mineral commodity production statistics the quantities and values of individual minerals produced are recorded in terms of the form in which they are dispatched from the locality of each mine. For example, in the case of metalliferous mines, the output is recorded as ore if no treatment is undertaken at the mine, or as a concentrate if ore-dressing operations are carried out in associated works in the locality of the mine. In addition to the basic quantity data, the contents of metallic minerals and contents or average grade of selected non-metallic minerals are recorded. Whenever practicable, contents (based on assay) of metallic minerals are shown for each metal which is a 'pay metal' or a 'refiners' prize' when present in the particular mineral. In general, other metallic contents which are not recovered are excluded. Individual mineral products are arranged in four groups corresponding to the major groups of the industry, namely metal mining, fuel mining, non-metal mining (excluding fuels), and construction material quarrying, referred to on page 1010. Particulars relating to uranium bearing minerals are excluded.

The following tables show particulars of the quantity of the principal minerals produced during 1967 and earlier years.

QUANTITIES OF PRINCIPAL MINERALS PRODUCED STATES AND NORTHERN TERRITORY, 1967

Mineral		*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*Aust.*
METALLIC MINERALS									
Antimony concentrate .	tons	152	..	..	..	..	..	..	152
Bauxite	'000 tons	11	2	2,810	..	1,354	..	..	4,176
Beryllium ore . . .	tons	44	..	..	..	11	..	..	55
Chromite . . .	,,	..	138	..	..	..	..	..	138
Copper ore(*a*) . .	,,	525	72	19,141	1,447	776	8,422	1,070	31,453
Copper concentrate . .	,,	35,731	2	262,673	..	3,093	55,600	34,855	391,954
Copper precipitate . .	,,	173	..	20	..	..	90	442	725
Gold(*b*)	oz	186	11,749	48,477	1	877,221	160	59,999	997,793
Ilmenite concentrate .	tons	11,356	..	2,946	..	529,914	..	..	544,216
Iron ore(*c*) . . .	'000 tons	..	..	..	4,561	12,012	..	314	16,887
Lead ore(*d*) . . .	tons	8,979	..	9,245	..	..	..	..	18,224
Lead concentrate . .	,,	364,124	..	156,078	..	910	13,766	2,315	537,193
Lead-copper concentrate .	,,	..	..	..	..	..	12,227	..	12,227
Lead-zinc concentrate .	,,	14,685	..	..	..	..	..	..	14,685
Leucoxene concentrate .	,,	..	..	..	..	696	..	..	696
Manganese ore . .	,,	29	..	..	..	195,065	..	364,873	559,967
Monazite concentrate .	,,	494	..	247	..	1,570	..	..	2,313
Pyrite concentrate . .	,,	..	..	11,740	102,609	78,685	59,714	..	252,748
Rutile concentrate . .	,,	184,390	..	80,724	..	400	..	..	265,514
Tantalite-columbite concentrate	lb	..	..	..	..	79,587	..	..	79,587
Tin concentrate . .	tons	2,669	47	2,323	..	1,074	2,349	95	8,557
Tungsten concentrates—									
Scheelite concentrate .	,,	1	..	..	..	1	1,200	..	1,202
Wolfram concentrate .	,,	5	..	3	..	1	435	4	448
Xenotime . . .	,,	..	..	..	..	18	..	..	18
Zinc concentrate . .	,,	538,756	..	78,329	..	..	81,751	3,956	702,792
Zircon concentrate . .	,,	176,304	..	75,212	..	32,166	..	..	283,682
FUEL MINERALS									
Coal, black—									
Semi-anthracite . .	'000 tons	..	..	37	..	..	2	..	38
Bituminous . . .	,,	26,813	32	4,379	..	..	75	..	31,299
Sub-bituminous . .	,,	..	..	264	2,045	1,062	..	..	3,370
Total coal, black .	,,	*26,813*	*32*	*4,679*	*2,045*	*1,062*	*77*	..	*34,707*
Coal, brown (lignite) .	,,	..	23,384	..	..	..	..	..	23,384
Natural gas . . .	'000 cu ft	..	..	126,785	..	25,575	..	..	152,360
Crude oil . . .	'000 barrels	..	..	2,781	..	4,819	..	..	7,600

For footnotes *see* next page.

QUANTITIES OF PRINCIPAL MINERALS PRODUCED STATES AND NORTHERN TERRITORY, 1967—*continued*

Mineral		*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*Aust.*
NON-METALLIC (EXCLUDING FUEL) MINERALS									
Asbestos	short tons	515	..	..	..	85	..	..	600
Barite	tons	1,600	..	..	13,104	962	..	..	15,666
Clays—									
Brick clay and shale	'000 tons	2,546	1,616	451	419	510	155	..	5,696
Other(*e*)	,,	419,798	226,971	76,148	93,655	104,205	40,318	..	961,095
Diatomite	tons	2,183	5,190	(*f*)	..	(*f*)	..	..	11,103
Dolomite(*g*)	,,	8,237	..	(*f*)	270,935	..	(*f*)	..	290,659
Felspar	,,	2,510	..	..	1,598	342	..	..	4,450
Gypsum	,,	42,504	224,065	..	607,437	40,078	..	..	914,084
Limestone(*g*)	'000 tons	2,706	1,992	1,022	1,591	699	345	..	8,355
Magnesite	tons	22,207	..	..	188	1,258	..	..	23,653
Phosphate rock	,,	..	..	..	11,770	..	..	..	11,770
Salt, crude	,,	..	(*f*)	(*f*)	516,166	(*f*)	..	..	703,157
Silica (glass, chemical, etc.)(*e*)	,,	289,175	..	64,992	34,594	41,778	13,016	..	443,555
Talc	,,	2,690	..	..	7,188	7,901	..	..	17,779
CONSTRUCTION MATERIALS(*e*)									
Sand	'000 tons	4,525	4,210	n.a.	1,756	n.a.	231	(*i*)1,193	(*h*)11,149
River gravel	,,	2,293	3,624	n.a.	921	n.a.	1,445		(*h*)9,048
Dimension stone	,,	44	10	2	47	127	3	(*i*)566	286
Crushed and broken stone	,,	8,454	18,012	4,686	10,540	3,058	1,158		46,268
Other (decomposed rock, etc)	,,	21,732	2,519	542	n.a.	n.a.	256		(*h*)25,202

(*a*) Includes cupreous ore for fertiliser. (*b*) Bullion, alluvial, retorted gold, etc. (*c*) Iron oxide for metal extraction. (*d*) Includes lead-silver-zinc ore. (*e*) Incomplete, *see* Coverage, page 1009. (*f*) Not available for publication. (*g*) Excludes quantities used directly as building or road material. (*h*) Incomplete, *see* individual States. (*i*) Includes Australian Capital Territory which is not available for publication by individual items.

NOTE. Particulars of the production of uranium concentrate are not available for publication.

QUANTITIES OF PRINCIPAL MINERALS PRODUCED: AUSTRALIA 1963 TO 1967

Mineral		*1963*	*1964*	*1965*	*1966*	*1967*
METALLIC MINERALS						
Antimony ore and concentrate	tons	115	414	55	150	152
Bauxite	'000 tons	354	784	1,168	1,798	4,176
Beryllium ore	tons	110	111	38	52	55
Chromite	,,	160	72	23	..	138
Copper ore(*a*)	,,	82,035	59,686	41,325	53,463	31,453
Copper concentrate	,,	434,368	427,258	389,398	477,987	391,954
Copper precipitate	,,	504	264	299	723	725
Gold(*b*)	'000 oz	1,231	1,150	1,119	1,079	998
Ilmenite concentrate	tons	200,983	303,628	441,034	513,011	544,216
Iron ore(*c*)	'000 tons	5,515	5,669	6,695	10,893	16,887
Lead ore(*d*)	tons	16,249	25,174	24,906	19,221	18,224
Lead concentrate	,,	584,462	536,213	503,356	515,573	537,193
Lead-copper concentrate	,,	9,309	10,214	10,424	12,083	12,227
Lead-zinc concentrate	,,	..	..	..	14,254	14,685
Leucoxene concentrate	,,	547	656	380	756	696
Manganese ore	,,	36,061	61,109	100,369	312,540	559,967
Monazite concentrate	,,	1,992	1,981	2,305	1,984	2,313
Pyrite concentrate	,,	194,059	220,078	204,011	245,998	252,748
Rutile concentrate	,,	183,260	182,371	217,330	243,858	265,514
Tantalite-columbite concentrate	lb	30,889	33,600	25,581	10,550	79,587
Tin concentrate	tons	4,132	5,314	6,237	7,604	8,557
Tungsten concentrates—						
Scheelite concentrate	,,	958	1,020	1,150	1,308	1,202
Wolfram concentrate	,,	394	380	487	498	448
Xenotime	..	..	..	..	..	18
Zinc concentrate	,,	594,861	588,840	604,211	638,788	702,792
Zircon concentrate	,,	184,830	184,082	226,863	235,649	283,682

For footnotes *see* next page.

QUANTITIES OF PRINCIPAL MINERALS PRODUCED: AUSTRALIA 1963 TO 1967—*continued*

Minerals		*1963*	*1964*	*1965*	*1966*	*1967*
FUEL MINERALS						
Coal, black—						
Semi-anthracite	'000 tons	61	79	70	45	38
Bituminous	,,	22,268	24,477	28,228	30,045	31,299
Sub-bituminous	,,	2,528	2,845	3,140	3,243	3,370
Total coal, black . .	,,	*24,856*	*27,401*	*31,439*	*33,334*	*34,707*
Coal, brown (lignite) . .	,,	18,456	19,035	20,659	21,783	23,384
Natural gas	'000 cu ft	95,725	106,490	143,402	143,478	152,360
Natural gas condensate . .	barrels	123	245	122	121	. .
Crude oil	'000 barrels	. .	1,244	2,622	3,390	7,600
NON-METALLIC (EXCLUDING FUEL) MINERALS						
Asbestos	short tons	13,374	13,654	11,566	13,468	600
Barite	tons	8,220	12,302	11,976	13,724	15,666
Clays—						
Brick clay and shale . .	'000 tons	4,549	5,163	5,056	5,187	5,696
Other (*e*)	,,	984	1,039	1,007	1,052	961
Diatomite	tons	5,133	8,732	7,063	7,592	11,103
Dolomite(*f*)	,,	214,339	236,068	258,661	256,008	290,659
Felspar	,,	8,842	9,021	8,726	7,259	4,450
Gypsum	,,	725,444	795,003	833,521	801,552	914,084
Limestone (*f*). . . .	'000 tons	6,721	7,223	7,516	7,730	8,355
Magnesite	tons	56,946	31,250	26,362	19,556	23,653
Phosphate rock . . .	,,	4,925	5,689	4,519	5,715	11,770
Salt, crude	,,	581,537	545,491	654,533	644,817	703,157
Silica (glass, chemical, etc.) (*e*)	,,	247,928	322,269	320,937	347,123	443,555
Talc	,,	13,106	15,695	19,719	17,327	17,779
CONSTRUCTION MATERIALS(*e*)						
Sand	'000 tons	9,050	10,757	11,444	10,666	11,149
River gravel	,,	7,625	8,117	7,760	8,549	9,048
Dimension stone	,,	629	590	467	241	286
Crushed and broken stone .	,,	29,768	34,175	39,733	46,796	46,268
Other (decomposed rock, etc.) .	,,	20,830	23,460	21,363	22,216	25,202

(*a*) Includes cupreous ore for fertiliser. (*b*) Bullion, alluvial, retorted gold, etc. (*c*) Iron oxide for metal extraction (*d*) Includes lead-silver-zinc ore. (*e*) Incomplete, owing to difficulties of coverage. *See* Coverage, page 1009. (*f*) Excludes quantities used directly as building or road material.

NOTE. Particulars of production of uranium concentrate are not available for publication.

Contents of metallic minerals produced

The following tables show the contents of metallic minerals produced in 1967 and earlier years.

CONTENTS OF METALLIC MINERALS PRODUCED STATES AND NORTHERN TERRITORY, 1967

Content of metallic minerals produced		*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*Aust.*
Alumina (Al_2O_3)	'000 tons	4	1	1,644	..	609	..	..	2,258
Antimony	,,	930	..	..	..	..	..	..	930
Beryllium oxide (BeO)	units(*a*)	550	..	..	..	125	..	..	675
Bismuth	lb	..	..	..	..	..	..	25,536	25,536
Cadmium	tons	1,079	..	160	..	..	73	12	1,324
Chromic oxide (Cr_2O_3)	,,	..	44	..	..	..	..	..	44
Cobalt	,,	100	..	..	..	45	..	1	146
Copper	,,	11,393	5	51,457	85	1,027	17,468	8,926	90,361
Gold	fine oz	10,716	10,996	95,601	1	573,755	37,528	76,739	805,336
Iron(*b*)	'000 tons	..	..	..	2,906	7,725	..	201	10,831
Lead	tons	282,173	..	76,439	..	688	15,134	1,345	375,779
Manganese(*c*)	,,	6,092	..	..	..	89,024	243	169,301	264,660
Manganese dioxide (MnO_2)(*d*)	,,	21	..	..	..	..	..	207	228
Monazite	,,	434	..	237	..	1,492	..	..	2,163
Silver	'000 fine oz	10,714	..	6,832	..	224	1,798	274	19,842
Sulphur(*e*)	tons	223,338	..	30,851	42,275	34,359	61,548	..	392,371
Tantalite-columbite ($Ta_2O_5 + Nb_2O_5$)	lb	..	..	..	..	32,906	..	..	32,906
Tin	tons	1,569	33	1,649	..	747	1,528	60	5,586
Titanium dioxide (TiO_2)	,,	182,122	..	78,880	..	291,892	..	..	552,894
Tungstic oxide (WO_3)	units(*a*)	349	..	195	..	143	118,253	270	119,210
Xenotime	lb	..	..	..	..	9,475	..	..	9,475
Zinc	tons	298,672	..	51,034	34	..	48,850	1.937	400,527
Zircon	,,	174,502	..	74,460	..	31,362	..	..	280,324

(*a*) 1 unit = 22.4 lb. (*b*) Excludes iron content of iron oxide not intended for metal extraction. (*c*) Content of metallurgical grade manganese ore and zinc concentrate. (*d*) Content of manganese ore of other than metallurgical grade. (*e*) Sulphur content of pyrite and other minerals from which sulphur is extracted.

NOTE. Particulars of production of uranium oxide (U_3O_8) are not available for publication.

CONTENTS OF METALLIC MINERALS PRODUCED: AUSTRALIA, 1963 TO 1967

Content of metallic minerals produced		*1963*	*1964*	*1965*	*1966*	*1967*
Alumina (Al_2O_3)	'000 tons	154	396	613	939	2,258
Antimony	,,	1,007	1,116	944	971	930
Beryllium oxide (BeO)	units(*a*)	1,278	1,279	457	637	675
Bismuth	lb	..	..	..	717	25,536
Cadmium	tons	1,210	1,154	1,155	1,212	1,324
Chromic oxide (Cr_2O_3)	,,	72	32	10	..	44
Cobalt	,,	86	73	90	84	146
Copper	,,	112,967	104,050	90,388	109,537	90,361
Gold	fine oz	1,023,970	963,834	877,643	916,985	805,336
Iron(*b*)	'000 tons	3,558	3,655	4,297	6,956	10,831
Lead	tons	410,291	374,856	362,137	364,898	375,779
Manganese(*c*)	,,	23,951	36,564	55,280	151,401	264,660
Manganese dioxide (MnO_2)(*d*)	,,	1,228	1,033	1,652	4,091	228
Molybdenum disulphide (MoS_2)	lb	21,645	..	41,911	5,549	..
Monazite	tons	1,875	1,848	2,165	1,836	2,163
Platinum	oz	4	..	..	13	..
Silver	'000 fine oz	19,642	18,427	17,281	18,888	19,842
Sulphur(*e*)	tons	345,636	346,502	345,554	371,567	392,371
Tantalite-columbite ($Ta_2O_5 + Nb_2O_5$)	lb	12,935	12,499	10,281	5,698	32,906
Tin	tons	2,860	3,642	3,849	4,807	5,586
Titanium dioxide (TiO_2)	,,	288,050	342,646	448,318	516,745	552,894
Tungstic oxide (WO_3)	units(*a*)	96,000	99,541	117,672	130,776	119,210
Xenotime	lb	..	..	..	..	9,475
Zinc	tons	351,470	344,600	349,231	369,341	400,527
Zircon	,,	182,112	182,174	224,654	232,903	280,324

(*a*) 1 unit = 22.4 lb. (*b*) Iron oxide for metal extraction. (*c*) Content of metallurgical grade manganese ore and zinc concentrate. (*d*) Content of manganese ore of other than metallurgical grade. (*e*) Sulphur content of pyrite and other minerals from which sulphur is extracted.

NOTE. Particulars of production of uranium oxide (U_3O_8) are not available for publication.

MINE PRODUCTION OF PRINCIPAL METALS: AUSTRALIA

(METALLIC CONTENT OF MINERALS)

1936 TO 1968

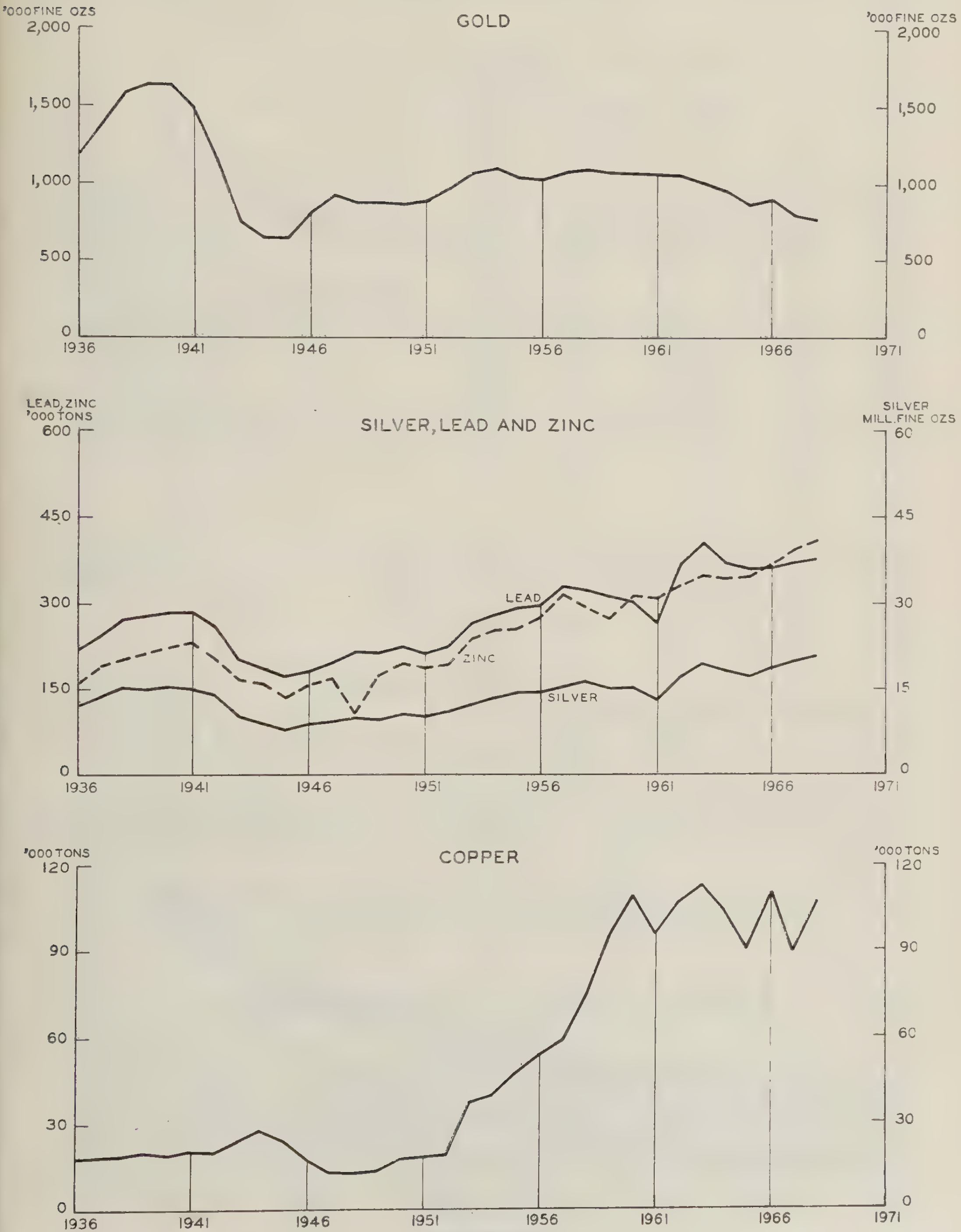
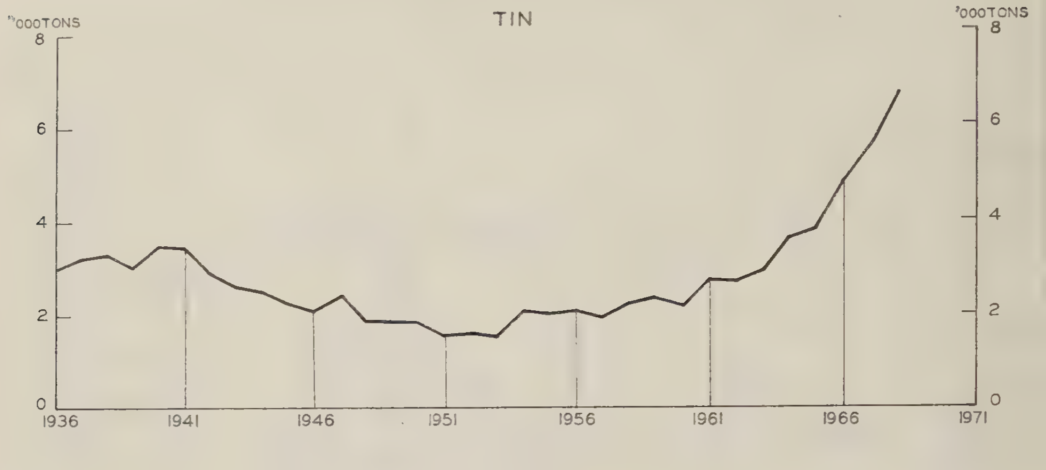


PLATE 50

MINE PRODUCTION OF PRINCIPAL METALS AND PRODUCTION OF COAL

(METALLIC CONTENT OF MINERALS)

AUSTRALIA, 1936 to 1968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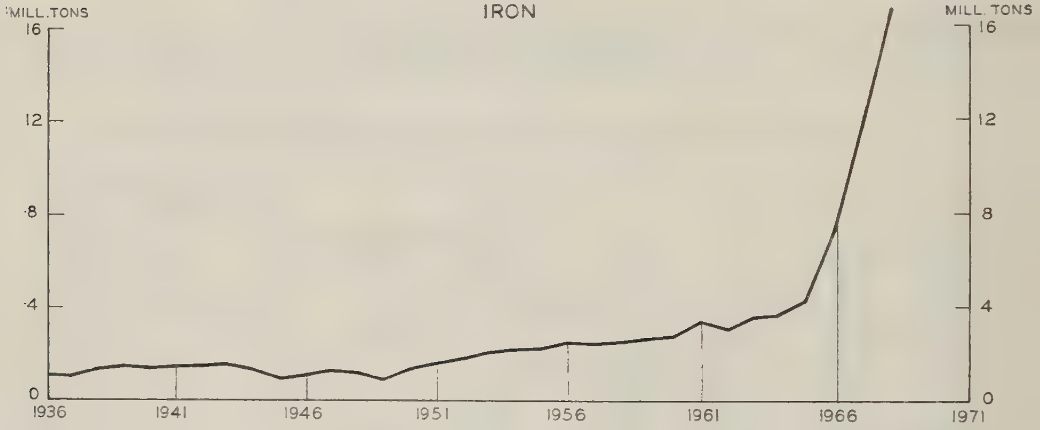
IRON

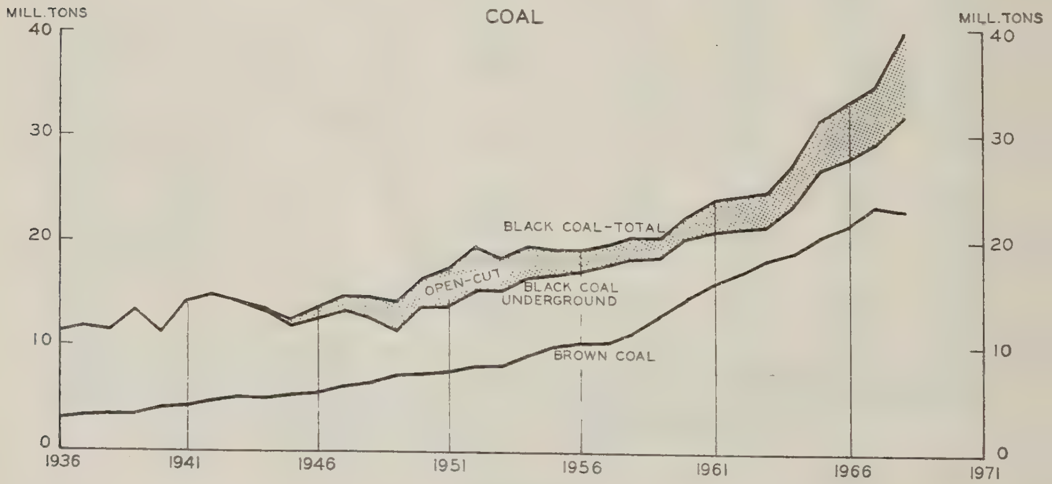
COAL

PLATE 51

Graphs showing details of the mine production of principal metals (metallic content) and coal from 1936 to 1968 are included on plates 50 and 51, pages 1021 and 1022.

Local value of minerals produced, 1963 to 1967

Particulars of the values of minerals (mine and quarry products) produced are shown in the following table. The values represent the selling value at the mine or quarry of minerals produced during the years concerned.

LOCAL VALUE OF MINERALS PRODUCED: AUSTRALIA, 1963 TO 1967
($'000)

Mineral	*1963*	*1964*	*1965*	*1966*	*1967*
Metallic minerals—					
Bauxite	1,748	3,064	4,600	(*a*)	(*a*)
Copper ore, concentrate, etc.	52,036	51,380	50,790	87,523	72,515
Gold ore, concentrate, other forms, etc.	29,556	26,666	25,619	26,371	24,456
Ilmenite concentrate	1,554	2,208	3,755	4,242	4,390
Iron ore	12,200	12,550	14,640	41,728	82,994
Lead and lead-silver ore and concentrate, lead-copper concentrate, etc.	56,320	80,806	87,947	76,831	73,654
Manganese ore	492	750	808	3,462	8,007
Pyrite concentrate	2,354	3,054	3,040	(*a*)	(*a*)
Rutile concentrate	12,114	12,080	15,038	17,088	19,615
Tin concentrate	5,784	10,224	12,237	14,332	15,011
Tungsten concentrates	900	1,420	2,692	4,469	4,509
Zinc ore and concentrate	16,468	35,456	36,818	32,890	29,354
Zircon concentrate	3,550	3,462	6,136	8,255	10,937
Other metallic minerals	432	522	548	610	4,023
Total, metallic minerals	*195,508*	*243,642*	*264,668*	*327,633*	*370,892*
Fuel minerals—					
Coal, black	118,260	128,038	143,703	151,380	160,099
Coal, brown	16,156	17,304	18,436	20,064	20,686
Other fuel minerals	(*b*)	2,164	5,344	9,229	21,286
Total, fuel minerals	*134,416*	*147,506*	*167,483*	*180,675*	*202,071*
Total, non-metallic minerals(*c*)	26,038	27,814	29,244	31,921	31,946
Total, construction materials(*c*)	60,720	73,244	80,183	83,449	91,789
Total, all minerals and construction materials	**416,682**	**492,208**	**541,578**	**623,678**	**696,701**

(*a*) Not available for publication. (*b*) Included with black coal. (*c*) Incomplete owing to difficulties of coverage. *See* scope and sources of statistics, page 1009.

NOTE. Particulars of the value of uranium concentrate produced are not available for publication and have been excluded from the table above.

Owing to the necessity of classifying individual mines according to the principal mineral produced, the values in the table on page 1015 for mining industry groups differ slightly in some cases from totals of the corresponding groups of mine products shown in the table above.

Overseas participation in Australian mining industry

Introduction

Any attempt to provide statistical information on the extent of overseas participation in local industry involves difficult problems of statistical concept and measurement. Broadly, there are two ways in which overseas participation may be measured. One is to examine the financial accounts of Australian companies and compare the value of *assets* of companies in which there is significant overseas investment with those other Australian companies. The other is to examine the *operations* (as expressed in terms of production, wages and salaries, output etc.) of establishments of Australian companies in which there is significant overseas investment and compare their operations with those of establishments of other Australian companies. The second method has been adopted for a series of studies in overseas participation in the Australian mining industry.

Scope of the statistics

The statistics relate to the operations of establishments employing four or more persons in the mining and quarrying industry as defined for the annual mining and quarrying census except for establishments engaged in construction material quarrying and clay mining, which are excluded.

Classification of companies

The extent of overseas participation in the mining industry is measured by the operations of the establishments of companies in which there is direct investment from overseas (as determined by the annual survey of overseas investments). These are defined as follows.

(i) Companies in Australia in which at least 50 per cent of the ordinary shares (or voting stock) is held by individual shareholders or companies resident in one overseas country, or where 25 per cent or more of the ordinary shares (or voting stock) is held by one company, or a group of companies, incorporated in one overseas country.

(ii) Branches of companies incorporated overseas and registered in Australia as foreign companies.

(iii) Wholly and partly owned subsidiaries and sub-subsidiaries, etc., of companies included in (i) and (ii) above, provided that the proportion of their equity which is attributable to overseas ownership does not fall below the percentage limits specified in (i) above.

Investment in ordinary shares (or voting stock) of Australian companies (including companies in which there is direct investment from overseas) where the proportion of shares held in a single country falls below the percentages specified in (i) above is defined as portfolio investment. Because of the difficulties encountered in determining the proportion of ordinary shares (or voting stock) of individual Australian companies held by portfolio investors overseas, *the figures for overseas participation in the mining industry exclude participation by way of portfolio investment.*

Further information available

In the following tables the degree of overseas participation is expressed in terms of value of production only. Further details in terms of the value of power, fuel and materials used, value of output, value of additions and replacements to fixed assets, salaries and wages paid, and average number of persons employed, as well as the value of production, may be found in the mimeographed bulletin *Overseas Participation in Australian Mining Industry, 1967.*

OVERSEAS OWNERSHIP AND CONTROL

In analysing the extent of overseas participation in local industry it is usual to distinguish between two aspects, overseas ownership and overseas control.

Overseas ownership

Statistics which give a general indication of the degree of overseas ownership in terms of the value of production of Australian mining establishments are presented in the two following tables. In the compilation of these statistics the data for an establishment of a company in which there is no direct investment from overseas are allocated wholly to Australian ownership. The data relating to an establishment of a company in which there is direct investment from overseas are apportioned to overseas and Australian ownership according to the proportion of the ordinary shares (or voting stock) of the company that is held by the direct overseas investors.

However, an exception has been made to the strict application of the definition of direct overseas investment in the measurement of overseas ownership of the Australian mining industry. This exception is designed to take account of a small number of important cases of portfolio investment where overseas companies participated in a consortium of companies which made the initial decision to develop a major mining project. The participation of these companies in the initial decision for the development of the mining project implies a kind of participation different from that normally associated with portfolio investment and more akin to direct investment. Special arrangements have been made therefore, to include in the measurement of overseas ownership, investment by overseas companies whose participation is represented by 10 per cent or more of the ordinary shares of such projects. This participation is not taken into account in statistics of overseas control. This change has had a minor effect on statistics of overseas ownership of the Australian mining industry for 1966 and earlier years.

MINING(*a*): VALUE OF PRODUCTION APPORTIONED TO AUSTRALIAN AND DIRECT OVERSEAS OWNERSHIP, BY INDUSTRY, 1965 TO 1967

Industry and ownership	*Value ($'000)* 1965	1966	1967	*Proportion Australian and overseas (per cent)* 1965	1966	1967
Metal mining—						
Australian(*b*) . . .	120,179	144,588	149,095	56.4	53.7	50.0
Overseas	92,876	124,622	149,013	43.6	46.3	50.0
Fuel mining—						
Australian(*b*) . . .	106,594	109,844	118,253	79.8	76.9	74.4
Overseas	27,007	32,918	40,593	20.2	23.1	25.6
Non-metal (excluding fuel) mining—						
Australian(*b*) . . .	10,015	10,830	10,870	82.8	81.1	80.4
Overseas . . .	2,082	2,521	2,658	17.2	18.9	19.6
Total mining—						
Australian(*b*) . . .	**236,789**	**265,262**	**278,218**	**66.0**	**62.4**	**59.1**
Overseas	**121,965**	**160,061**	**192,264**	**34.0**	**37.6**	**40.9**
Grand total . .	**358,754**	**425,323**	**470,483**	**100.0**	**100.0**	**100.0**

(*a*) Excludes construction material quarrying and clay mining. (*b*) Includes ownership by overseas portfolio investors.

MINING(*a*): VALUE OF PRODUCTION APPORTIONED TO DIRECT OVERSEAS OWNERSHIP(*b*), BY COUNTRY AND BY PROPORTION OF DIRECT OVERSEAS EQUITY, 1965 TO 1967

Country, and proportion of direct overseas equity	*Value ($'000)* 1965	1966	1967	*Proportion(c) (per cent)* 1965	1966	1967
Country—						
United Kingdom . .	74,777	79,891	90,095	20.8	18.7	19.2
United States of America .	33,294	64,613	87,256	9.3	15.2	18.5
Other	13,894	15,557	14,913	3.9	3.7	3.2
Proportion of direct overseas equity—						
25 per cent but less than 50 per cent . .	2,987	3,094	7,527	0.8	0.7	1.6
50 per cent but less than 75 per cent . .	32,359	47,901	37,642	9.0	11.3	8.0
75 per cent and over .	86,619	109,066	147,095	24.2	25.6	31.3
Total apportioned to direct overseas ownership . . .	**121,965**	**160,061**	**192,264**	**34.0**	**37.6**	**40.9**

(*a*) Excludes construction material quarrying and clay mining. (*b*) Excludes ownership by overseas portfolio investors. (*c*) Of total value of mining production.

Overseas control

The statistics in the following tables provide an indication of the relative importance of mining establishments of companies in which there is direct overseas investment. The concept of direct overseas investment is directly related to the concept of overseas control, and the statistics in these tables provide a measure of the value of production of mining establishments of companies which can be regarded as subject to a degree of overseas control. The statistics have been derived by allocating data relating to each mining establishment wholly to either one or the other of the following categories: (i) establishments of direct overseas investment companies; (ii) other establishments.

The classification of establishments of companies in which 50 per cent of the voting stock is held in one overseas country (or 25 per cent by one overseas company) as subject to a degree of overseas control is, of course, based on a statistical convention. Such a convention is needed because of the lack of specific information as to the arrangements for managerial control of individual companies.

The convention adopted for this study (including the actual percentages used) is the one suggested by the International Monetary Fund for use in the absence of other information. There are avenues of control other than through direct equity interest, e.g. through franchise or patent rights, marketing arrangements, financial commitments, etc. Such arrangements, of course, also typically exist between companies in which there is direct investment and their overseas parent companies and associated companies. Further, ownership of less than 25 per cent of voting stock may, in some cases, be sufficient to achieve effective control of a company's activities, just as in other cases ownership of more than 25 per cent of voting stock may not constitute control. In addition, the relationship between overseas parent companies and their Australian branches and subsidiaries covered by the statistics in the following tables can be one of *potential* rather than *actual* control.

A special problem does exist, however, in the strict application of the definition of direct overseas investment described above to the measurement of overseas control. This occurs where a single overseas company has an equity interest in an Australian company which is 25 per cent or more but less than 50 per cent. In such cases, a single Australian company may have an equity interest which is greater than the equity interest of the direct overseas investment company. To overcome this problem, an examination has been made of all companies engaged in mining in which the direct overseas equity is 25 per cent or more but less than 50 per cent. Where an Australian company holds a greater proportion of the equity than the direct overseas investment company the company is not regarded as subject to a degree of overseas control and is classified to 'other establishments'. However, this departure from the strict application of the definition of direct overseas investment to the measurement of overseas control does not affect the statistics for 1966 and earlier years.

MINING(*a*): VALUE OF PRODUCTION OF ESTABLISHMENTS OF DIRECT OVERSEAS INVESTMENT COMPANIES AND OTHER ESTABLISHMENTS, BY INDUSTRY
1965 TO 1967

	Value ($'000)			*Proportion (per cent)*		
Industry	*1965*	*1966*	*1967*	*1965*	*1966*	*1967*
Metal mining—						
Establishments of direct overseas investment companies	122,908	167,191	193,531	57.7	62.1	64.9
Other establishments	90,147	102,019	104,577	42.3	37.9	35.1
Fuel mining—						
Establishments of direct overseas investment companies	34,021	40,927	51,703	25.5	28.7	32.5
Other establishments	99,580	101,835	107,143	74.5	71.3	67.5
Non-metal (excluding fuel) mining—						
Establishments of direct overseas investment companies	3,036	3,669	3,862	25.1	27.5	28.5
Other establishments	9,061	9,681	9,667	74.9	72.5	71.5
Total mining—						
Establishments of direct overseas investment companies	**159,966**	**211,788**	**249,096**	**44.6**	**49.8**	**52.9**
Other establishments	**198,788**	**213,535**	**221,387**	**55.4**	**50.2**	**47.1**
Grand total	**358,754**	**425,323**	**470,483**	**100.0**	**100.0**	**100.0**

(*a*) Excludes construction material quarrying and clay mining.

MINING(*a*): VALUE OF PRODUCTION OF ESTABLISHMENTS OF DIRECT OVERSEAS INVESTMENT COMPANIES, BY PROPORTION OF DIRECT OVERSEAS EQUITY
1965 TO 1967

	Value ($'000)			*Proportion(b) (per cent)*		
Proportion of direct overseas equity	*1965*	*1966*	*1967*	*1965*	*1966*	*1967*
25 per cent but less than 50 per cent	7,704	7,948	17,492	2.2	1.9	3.7
50 " " " " " 75 " "	62,851	91,913	72,851	17.5	21.6	15.5
75 " " and over	89,412	111,927	158,753	24.9	26.3	33.7
Total establishments of direct overseas investment companies	**159,966**	**211,788**	**249,096**	**44.6**	**49.8**	**52.9**

(*a*) Excludes construction material quarrying and clay mining. (*b*) Of total value of production.

Mineral exploration (other than for petroleum)

Definition

Mineral exploration consists of the search for, and or appraisal of, new ore occurrences and known deposits of minerals (including extensions to deposits being worked) by geological, geophysical, geochemical, and other methods (including drilling). Exploration for water is excluded. The construction of shafts and adits is included if primarily for exploration purposes. Excluded are mine development activities (which include the construction of drives, shafts, winzes, etc.) in underground mines and the preparation of quarrying sites for open-cut extraction (including overburden removal) carried out primarily for the purpose of commencing or extending mining and quarrying operations. Mine development activities (including mines under development) are included in the scope of the annual census of mining and quarrying.

Sources of statistics

The statistics of exploration for minerals *other than petroleum* are derived from the annual mineral exploration collection (excluding petroleum exploration), which is carried out by this Bureau in association with State Mines Departments.

Scope of mineral exploration collection

The scope of the mineral exploration collection is limited to private exploration on leases held for production and exploration purposes, and all government exploration. General exploration survey work and other exploration activity not connected with particular leases are excluded.

Leaseholders were instructed to report details of total exploration activity on areas held by them including exploration carried out on these areas by other companies or persons under joint venture agreements, options to purchase, etc. However, it appears that some leaseholders may not have reported details of exploration carried out by others under option.

The scope of the collection is divided into the following three sections.

(*a*) *Private exploration on production leases*—relates to exploration carried out *on the production lease* by privately operated mines currently producing or under development for production of minerals other than petroleum. This also includes particulars of exploration within their production leases by business undertakings operated by State government authorities. Mines included in this section of the mineral exploration collection are practically the same as those in the annual census of mining and quarrying (*see* Statistical Bulletin *Mining and Quarrying*, No. 16, 1967 for further details) with the exception of a limited number of itinerant prospectors and small mines for which information was not collected.

(*b*) *Private exploration in other areas*—relates to exploration carried out on areas covered by exploration licences, authorities to enter, authorities to prospect, and similar licences and authorities issued by State Governments for exploration for minerals other than petroleum. Other commercial exploration, such as that carried out under option to purchase agreements, is excluded.

(*c*) *Exploration by government*—relates to exploration for minerals other than petroleum carried out by—

(i) Commonwealth Government (Bureau of Mineral Resources, Geology and Geophysics, and Joint Coal Board), and

(ii) State Mines Departments.

Summary of operations

The following table shows the amounts expended, the man-weeks worked, and the footage drilled, etc. in mineral exploration other than for petroleum during the years 1965 to 1967.

MINERAL EXPLORATION (OTHER THAN FOR PETROLEUM) SUMMARY OF OPERATIONS, AUSTRALIA, 1965 TO 1967

	1965	*1966*	*1967*
EXPLORATION EXPENDITURE(*a*)			
	$'000	$'000	$'000
On drilling	10,511	13,994	15,490
Other	15,071	17,693	23,903
Total	**25,582**	**31,687**	**39,393**
Payments to contractors(*b*)	6,372	8,380	12,181
MAN-WEEKS WORKED(*c*)			
	'000	'000	'000
By professional persons(*d*)	39.7	44.0	46.7
By non-professional persons(*e*) . . .	68.0	90.3	96.0
Total	**107.7**	**134.3**	**142.7**
FOOTAGE DRILLED, SUNK, OR DRIVEN			
Drilling—	'000 feet	'000 feet	'000 feet
Core	1,139	1,645	1,727
Non-core	1,400	2,375	3,138
Total	**2,539**	**4,020**	**4,866**
Other(*f*)	68	59	30

(*a*) Expenditure whether charged as working expenses or capitalised. (*b*) Amounts paid to drilling contractors, geological consultants, technical advisers, etc., for exploration services. Included in total expenditure shown. (*c*) Operator and staff only (includes time spent on report writing and similar off-site activities associated with exploration); excludes contractors and their employees. (*d*) Geologists, geophysicists, engineers, etc., engaged on exploration work. (*e*) Drill operators, field hands, etc. (*f*) Includes shafts, winzes, etc., sunk, and drives, adits, etc., driven.

Expenditure, employment, footage drilled, etc., States and Northern Territory

The following table shows expenditure, employment and footage drilled, etc. on mineral exploration other than for petroleum in each State and the Northern Territory during the years 1965 to 1967.

MINERAL EXPLORATION (OTHER THAN FOR PETROLEUM) STATES AND NORTHERN TERRITORY, 1965 TO 1967

EXPENDITURE(a)

($'000)

	1965	*1966*	*1967*
PRIVATE EXPLORATION			
New South Wales	4,460	4,872	4,594
Victoria	1,006	1,231	1,452
Queensland	4,372	8,340	11,657
South Australia	1,048	1,358	1,203
Western Australia	3,948	6,534	10,203
Tasmania	5,136	2,870	2,180
Northern Territory	2,389	2,909	3,532
Total	*22,360*	*28,115*	*34,822*
GOVERNMENT EXPLORATION			
Commonwealth(b)	1,525	1,923	2,803
State Mines Departments	1,697	1,649	1,768
Total	*3,223*	*3,572*	*4,571*
TOTAL EXPENDITURE			
Australia	**25,582**	**31,687**	**39,393**

EMPLOYMENT(c)

('000 man-weeks worked)

	1965	*1966*	*1967*
PRIVATE EXPLORATION			
New South Wales	17.0	19.2	22.5
Victoria	6.7	8.3	5.6
Queensland	26.0	35.6	27.2
South Australia	3.2	3.2	3.6
Western Australia	13.2	23.2	37.6
Tasmania	7.6	9.9	7.4
Northern Territory	10.0	8.8	8.8
Total	*83.6*	*108.2*	*112.6*
GOVERNMENT EXPLORATION			
Commonwealth(b)	8.3	11.1	14.2
State Mines Departments	15.8	15.0	15.9
Total	*24.1*	*26.1*	*30.1*
TOTAL			
Australia	**107.7**	**134.3**	**142.7**

For footnotes *see* next page.

FOOTAGE DRILLED, SUNK OR DRIVEN
('000 ft)

	1965	*1966*	*1967*
PRIVATE EXPLORATION			
New South Wales	767	946	908
Victoria	172	179	182
Queensland	600	1,515	2,029
South Australia	123	183	161
Western Australia	343	640	907
Tasmania	188	169	152
Northern Territory	221	248	259
Total	*2,413*	*3,880*	*4,598*
GOVERNMENT EXPLORATION			
Commonwealth(*b*)	8	6	6
State Mines Departments	186	194	290
Total	*194*	*200*	*296*
TOTAL FOOTAGE DRILLED, SUNK OR DRIVEN			
Australia	**2,607**	**4,080**	**4,896**

(*a*) Expenditure whether charged as working expenses or capitalised. (*b*) Bureau of Mineral Resources and Joint Coal Board. (*c*) Operator and staff only (includes time spent on report writing and similar off-site activities associated with exploration); excludes contractors and their employees.

Petroleum exploration

Definition

Petroleum exploration and development consists of the search for, and or development of, deposits of crude petroleum and or gas by geological, geophysical, geochemical, and other means, including drilling. Included in the expenditures are the costs of drilling both exploratory and developmental oil and or gas wells and the testing and completion (up to and including the wellhead fittings and valves to control flow—christmas tree—or pumping wells) of these wells. Also included are the cost of access roads, site construction, permits, licences and similar fees, relevant office buildings and furniture, transportation equipment, storage facilities, plant and equipment, and review work, all of which are undertaken primarily for purposes of exploration for, and or development of, deposits of petroleum or natural gas. Details of expenditure on production facilities, and pipelines and production costs, etc. are excluded.

Source of statistics

These statistics were collected and compiled by the Bureau of Mineral Resources, Geology and Geophysics, Canberra. Statistical and other information relating to petroleum exploration is published by the Bureau of Mineral Resources in *The Petroleum Newsletter* (issued quarterly), *The Australian Mineral Industry—Annual Review* and *Expenditures on Petroleum Exploration and Development*, 1965 (B.M.R. Record No. 1966 (205)).

Operations

The following tables show particulars of expenditure, and wells and footage drilled in petroleum exploration in recent years.

EXPENDITURE ON PETROLEUM EXPLORATION BY PRIVATE ENTERPRISE AND BY GOVERNMENTS: AUSTRALIA, 1963 TO 1967(a)

($'000)

	1963	*1964*	*1965*	*1966*	*1967*
PRIVATE SOURCES(*a*)					
Utilised in—					
New South Wales	3,726	1,956	3,640	1,706	1,284
Victoria	1,697	2,708	3,796	7,007	17,793
Queensland	12,256	13,620	17,292	14,213	6,096
South Australia	3,663	3,592	4,705	4,059	6,257
Western Australia	4,686	9,671	16,095	17,619	18,090
Tasmania	388	85	829	1,293	2,424
Northern Territory	1,787	3,415	6,759	6,578	6,978
Australia	*28,202*	*35,048*	*53,115*	*52,475*	*58,921*
GOVERNMENT SOURCES					
Payments under *Petroleum Search Subsidy Act* 1959–1964—					
Utilised in—					
New South Wales	1,147	573	633	724	516
Victoria	1,173	599	609	640	727
Queensland	5,123	4,105	3,818	2,194	1,767
South Australia	806	1,084	949	769	1,058
Western Australia	1,552	1,887	2,487	3,355	3,441
Tasmania	40	..	107	570	469
Northern Territory	399	481	1,157	1,365	1,657
Total subsidy payments, Australia	*10,240*	*8,729*	*9,759*	*9,617*	*9,635*
Utilised for—					
Geophysical	5,150	4,447	5,311	4,910	4,512
Drilling	5,090	4,282	4,448	4,707	5,123
Other Government sources—					
Commonwealth(*a*)	3,083	4,035	3,824	3,649	4,508
State Mines Departments	n.a.	809	711	767	466
Total other sources, Australia	*3,083*	*4,844*	*4,535*	*4,416*	*4,974*
Total Government sources, Australia	*13,323*	*13,573*	*14,294*	*14,033*	*14,609*
TOTAL FUNDS, PRIVATE AND GOVERNMENT					
Australia	**41,525**	**48,621**	**67,409**	**66,508**	**73,530**

(*a*) Excludes payments under the *Petroleum Search Subsidy Act* 1959–1964.

WELLS AND FOOTAGE DRILLED IN PETROLEUM EXPLORATION STATES AND TERRITORIES, 1967

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*Total*
Wells drilled(*a*)	9	10	40	15	194	5	1	274
Average total depth of wells drilled . . . feet	4,020	7,371	5,460	7,115	5,444	2,516	..	5,573
Wells completed as potential oil producers	..	3	6	..	164	..	1	174
Wells completed as potential gas producers	..	1	6	4	2	..	..	13
Wells drilled or drilling over 10,000 feet	1	2	1	3	4	..	..	11
Footage drilled— Completed wells . feet	21,882	74,553	202,696	104,993	561,324	11,881	8,750	986,079
Uncompleted holes(*b*) feet	11,140	6,768	12,330	7,930	7,714	..	7,980	53,862
Total footage drilled	*33,022*	*81,321*	*215,026*	*112,923*	*569,038*	*11,881*	*16,730*	*1,039,941*

(*a*) Number of holes which reached total depth during the year. (*b*) Uncompleted holes means wells suspended or drilling at 31 December 1967.

WELLS AND FOOTAGE DRILLED IN PETROLEUM EXPLORATION STATES AND TERRITORIES TO 31 DECEMBER 1967

	To 31 December 1965		*1966*		*1967*		*To 31 December 1967*	
State or Territory	*Wells*	*Footage*	*Wells*	*Footage*	*Wells*	*Footage*	*Wells*	*Footage*
New South Wales	94	324,507	5	42,269	9	33,022	108	399,798
Victoria	175	444,718	6	31,265	10	81,321	191	557,304
Queensland	516	2,481,095	65	375,271	40	215,026	621	3,071,392
South Australia	128	341,814	13	66,925	15	112,923	156	521,662
Western Australia	158	718,763	37	200,129	194	569,038	389	1,487,930
Tasmania	22	21,717	1	6,607	5	11,881	28	40,205
Northern Territory	30	140,187	7	33,356	1	16,730	38	190,273
Total	..	..	*134*	*755,822*	*274*	*1,039,941*	..	..
Cumulative total	**1,123**	**4,472,801**	**1,257**	**5,228,623**	**1,531**	**6,268,564**	**1,531**	**6,268,564**

Mineral processing and treatment

The extraction of minerals from ore deposits, as in mining and quarrying, is only part of the wider field of mineral technology. It is only in rare instances that minerals can be used directly in the form in which they are produced by mines, and, much more commonly, minerals must undergo considerable processing and treatment before their full utility and value can be realised. Examples of this processing and treatment are the smelting and refining of metals, the production of coke from coal, the refining of oil, and the treatment of non-metallic minerals as in the production of superphosphate and other chemicals and building materials like bricks and cement. The sectors of the economy which carry out this work are classified for statistical purposes to the manufacturing industry, and particulars relating to those activities which principally involve mineral processing and treatment—i.e. the treatment of non-metalliferous mine and quarry products, the manufacture of mineral oils and chemical fertilisers, the smelting, converting, refining and rolling of iron and steel, the extracting and refining of other metals, and the manufacture of alloys are given in the chapter Manufacturing Industry, pages 1044–68 and 1077–82.

Principal products

The following table shows particulars of the production of certain important manufactured products of mineral origin during the years 1963–64 to 1967–68. Secondary metal is excluded from the metal production statistics except in the case of ingot steel. For blister copper and lead bullion the figures shown relate to the copper and lead content respectively.

PRODUCTION OF PRINCIPAL MANUFACTURED PRODUCTS OF MINERAL ORIGIN: AUSTRALIA, 1963-64 TO 1967-68

Commodity		*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
METALS						
Non-ferrous—						
Alumina	tons	94,448	175,398	227,077	474,716	1,136,208
Refined aluminium	„	58,937	85,497	87,222	92,826	87,737
Blister copper(*a*)	„	92,809	57,880	98,529	77,888	74,967
Refined copper	„	89,222	53,441	91,588	74,313	71,952
Lead bullion (for export)(*a*)	„	78,304	63,827	81,709	84,690	101,695
Refined lead	„	217,292	199,032	188,197	192,429	186,908
Refined zinc	„	186,389	189,395	196,534	197,030	187,565
Refined tin	„	2,959	2,931	3,524	3,224	3,955
Ferrous—						
Pig iron	'000 tons	3,772	3,936	4,380	4,893	5,209
Steel ingots	„	4,773	5,131	5,561	6,057	6,298
Precious—						
Refined gold(*b*)	'000 f oz	911	871	774	726	655
Refined silver	„	9,392	8,939	8,766	9,825	9,597
FUELS						
Coal products—						
Metallurgical coke	'000 tons	2,915	3,118	3,179	3,365	3,678
Brown coal briquettes	„	1,883	1,893	1,883	1,820	1,745
Petroleum products—						
Motor spirit	mill. gal	1,358	1,482	1,524	1,763	1,897
Furnace fuel	'000 tons	4,686	4,869	5,340	5,759	6,206
Automotive distillate	„	1,616	1,603	1,829	2,167	2,344
Industrial diesel fuel	„	917	862	859	901	984
BUILDING MATERIALS						
Clay bricks	millions	1,238	1,353	1,360	1,358	1,404
Portland cement	'000 tons	3,320	3,746	3,688	3,661	3,805
Plaster of paris	„	260	277	266	261	278
Plaster sheets	'000 sq yd	(*c*)15,922	29,937	29,917	30,601	32,809
CHEMICALS						
Sulphuric acid	'000 tons	1,447	1,610	1,752	1,991	1,892
Caustic soda	tons	64,230	68,879	75,229	91,009	98,190
Superphosphate	'000 tons	3,347	3,703	4,265	4,430	3,934

(*a*) Metallic content. (*b*) Newly-won gold of Australian origin. (*c*) Fibrous plaster sheets only.

Overseas trade

Exports and imports

Data of imports and exports of minerals and mineral products have been extracted from the official trade statistics compiled in the Commonwealth Bureau of Census and Statistics. Particulars of the quantities and values ($ f.o.b. port of shipment) of the principal minerals and mineral products exported from and imported into Australia during the years 1965 to 1967 are shown in the following table.

EXPORTS AND IMPORTS OF PRINCIPAL MINERALS AND MINERAL PRODUCTS AUSTRALIA, 1965 TO 1967

Item		*Quantity*			*Value ($'000 f.o.b.)*		
		1965	*1966*	*1967*	*1965*	*1966*	*1967*
				EXPORTS(*a*)			
Coal	tons	7,155,564	8,240,920	9,250,297	60,661	66,487	76,203
Copper—							
Ore and concentrate	,,	46,111	47,455	44,830	7,337	9,603	9,526
Ingots, pigs (refined)	,,	11,703	7,484	9,325	12,220	9,050	8,975
Rolled, drawn and extruded shapes	,,	11,721	11,907	7,043	11,444	12,896	8,102
Gold, refined	fine oz	745,125	752,782	537,922	23,265	23,583	16,942
Iron and steel—							
Iron ore	tons	149,824	2,011,979	9,017,084	1,239	16,863	75,372
Pig iron	,,	45,154	95,590	149,587	2,174	3,870	6,169
Ingots, blooms and slabs	,,	10,519	347,841	398,635	605	19,806	23,719
Tinplate	,,	71,363	87,945	56,252	9,282	10,651	7,452
Scrap	,,	308,648	378,673	475,056	9,773	8,510	14,226
Lead—							
Ore and concentrate	,,	108,256	109,134	124,016	20,829	19,386	23,166
Lead-silver bullion	,,	69,286	79,534	100,394	21,252	21,905	26,901
Pig	,,	156,545	159,504	147,558	43,502	37,786	30,282
Opals		..	..	..	5,324	7,652	8,620
Petroleum oils—							
Gasolenes and solvents	'000 gal	16,478	39,734	55,593	2,199	4,842	6,582
Kerosenes	,,	15,147	23,686	21,655	1,796	2,535	2,553
Automotive distillate	,,	41,458	91,881	62,964	3,836	7,287	5,310
Industrial and marine diesel fuels and heavy distillate, n.e.i.	,,	165,571			7,760		
Residual oils	,,		117,694	123,441		5,954	5,851
Lubricating oil	,,	15,697	17,654	28,664	4,776	5,557	8,577
Rutile concentrate	tons	239,454	231,289	258,791	17,134	17,844	19,692
Zinc—							
Ore and concentrate	,,	212,946	226,561	297,927	14,328	15,442	19,873
Refinery type shapes	,,	87,051	120,759	96,471	24,205	31,069	23,562
Zircon concentrate	,,	216,661	210,428	247,179	6,816	8,978	10,720
				IMPORTS			
Alumina	tons	55,647	51,091	37,047	3,900	3,365	2,543
Aluminium, refined ingots	,,	357	461	361	312	351	232
Asbestos	short tons	51,719	55,152	52,584	5,859	6,437	6,436
Gold, unrefined bullion(*b*)	fine oz	137,143	151,462	145,929	4,252	4,104	3,992
Ferro-alloys	tons	32,587	20,019	23,491	6,908	4,496	6,689
Petroleum oils—							
Crude	'000 gal	3,399,992	3,653,396	4,038,853	155,851	160,139	167,008
Enriched crude and other refinery feedstock	,,	899,284	962,162	999,338	40,391	41,783	43,976
Gasolenes and solvents	,,	270,503	190,718	141,888	30,749	20,936	13,949
Kerosene	,,	79,820	47,143	33,563	8,503	4,973	3,515
Automotive distillate	,,	45,474	43,084	18,370	4,153	3,505	1,578
Industrial and marine diesel fuels and heavy distillate, n.e.i.	,,	25,817			1,584		
Residual oils	,,		10,116	23,973		536	1,149
Lubricating oil	,,	20,646	13,009	11,363	5,602	3,864	3,565
Phosphate rock	'000 tons	2,527	3,286	3,265	17,505	27,479	30,355
Sulphur	tons	387,869	434,045	513,962	7,496	11,930	17,296
Tin, refined	,,	1,582	203	693	5,259	661	2,066
Titanium oxide (pigments)	,,	2,167	1,349	1,110	870	525	449

(*a*) Australian produce. (*b*) Gold content.

Considerable quantities of metallic ores, concentrates, slags, and residues are exported from Australia for refining overseas. The following table shows the quantities of selected items exported during 1967 and their principal metallic content as estimated by assay.

PRINCIPAL METALLIC CONTENTS OF SELECTED ORES AND CONCENTRATES ETC., EXPORTED FROM AUSTRALIA, 1967

	Metallic contents—estimated from assay								
Ores and concentrates, etc.	*Copper*	*Lead*	*Zinc*	*Tin*	*Tungstic oxide*	*Iron*	*Manga-nese*	*Gold*	*Silver*
	tons	tons	tons	tons	tons	tons	tons	fine oz	'000 fine oz
Copper concentrate(*a*)	10,748	..	..	..	..	..	..	22,049	105
Blister copper	6,857	..	..	..	..	..	..	88,164	31
Copper matte, slags, etc.(*b*)	1,962	2,870	23	..	..	..	..	39	228
Lead concentrate	1,276	86,820	7,340	..	..	..	..	21,497	2,574
Lead-silver bullion	..	99,822	..	..	..	..	..	..	7,043
Lead slags and residues	181	1,868	53	61	..	..	..	..	19
Zinc concentrate	..	2,219	153,559	..	..	..	..	..	107
Zinc slags and residues	5	5	4,665	..	..	..	..	..	..
Tin concentrate	12	5	..	1,601	2	..	..	..	..
Wolfram concentrate	..	..	..	..	288	..	..	..	..
Scheelite concentrate	..	..	..	..	845	..	..	..	..
Iron ore	..	..	..	..	..	5,838,827	..	..	..
Manganese ore	..	..	..	..	..	..	150,214	..	..
Total metallic content	**21,041**	**193,609**	**165,640**	**1,662**	**1,135**	**5,838,827**	**150,214**	**131,749**	**10,106**

(*a*) Includes copper precipitate. (*b*) Includes copper matte, copper slags and residues and copper-lead dross and speiss.

Direction of trade

The distribution of Australia's mineral exports according to principal destinations, and imports according to principal sources, for the years 1965 to 1967, are shown in the following table.

VALUE OF OVERSEAS MINERAL TRADE, BY COUNTRY OR REGION AUSTRALIA(*a*), 1965 TO 1967

	Value ($m f.o.b.)			*Percentage*		
Country or region	*1965*	*1966*	*1967*	*1965*	*1966*	*1967*
EXPORTS(*b*)						
Japan	92.4	124.2	208.3	32.5	37.5	49.9
Other Asian and Pacific	30.1	41.3	50.5	10.6	12.5	12.1
United Kingdom	68.2	65.3	63.5	24.0	19.7	15.2
European Economic Community	43.8	38.7	39.7	15.4	11.7	9.5
United States	42.5	46.0	37.5	14.9	13.9	9.0
Other	7.6	15.7	18.3	2.6	4.7	4.3
Total	**284.6**	**331.2**	**417.8**	**100.0**	**100.0**	**100.0**
IMPORTS						
Middle East	132.4	138.4	143.3	44.0	50.1	47.3
Indonesia	53.0	51.1	52.4	17.6	18.5	17.3
Other Asian	24.0	16.9	23.0	8.0	6.1	7.4
Pacific	14.3	19.9	23.1	4.8	7.2	7.6
United States	23.6	16.0	19.7	7.9	5.8	6.5
Canada	9.7	12.9	13.2	3.2	4.7	4.4
Europe (including United Kingdom and European Economic Community)	31.0	8.5	12.7	10.3	3.1	4.2
Other	12.6	12.7	15.5	4.2	4.5	5.1
Total	**300.6**	**276.4**	**302.9**	**100.0**	**100.0**	**100.0**

(*a*) Excludes gold movements. (*b*) Excludes alumina, details of which are not available for publication.

REVIEW OF RECENT DEVELOPMENTS IN THE AUSTRALIAN MINERAL INDUSTRY

Prior to Year Book No. 52 it was customary to include a series of detailed reviews of the principal commodities produced by the Australian mineral industry and recent developments concerning these commodities. However, with the increasing diversification and development of the industry, it has become impractical to continue these reviews in the Year Book and the reader who wishes to obtain information of this kind is referred to *The Australian Mineral Industry—Annual Review* published by the Bureau of Mineral Resources, Geology and Geophysics. That publication contains comprehensive reviews of mineral commodities of importance to the Australian economy, as well as a general review of the industry's performance during each year. Major developments in the industry, particularly during the last year, are reviewed briefly in subsequent parts of this section.

General review, 1968

Expansion of the Australian mineral industry was maintained during 1968, with the preliminary value of mineral production increasing by 22 per cent from $697 million in 1967 to $853 million in 1968.The major reasons for this increase in the value of mineral production were continued expansion of iron ore mining, and the increased production of crude oil at Barrow Island, copper concentrates in Queensland and black coal in New South Wales and Queensland. The total value of mineral exports continued to increase, mainly because of the increase of iron ore and coal shipments to Japan.

Bauxite

The history of the aluminium industry and recent significant developments in the industry were reviewed in previous issues of the Year Book (No. 51, page 1168 and No. 52, page 1048). The year 1968 was a period of continued growth in the industry both in mining and processing as detailed below.

Bauxite production from deposits at Weipa, Queensland, has been increased to a rate of 6 million tons per annum following completion of a further stage in the development of the mine and associated township, and of ore treatment and loading facilities. It is expected that production will rise to 7 million tons in 1970. Approximately 1.9 million tons from Weipa will be used by the Gladstone, Queensland, alumina refinery, a further 110 thousand tons will be shipped to Bell Bay, Tasmania, and the remaining production will be exported.

Bauxite deposits at Gove, Northern Territory, covering reserves of the order of 250 million tons of bauxite, are being developed by a consortium of seven Australian and one overseas company. The consortium plans to construct an alumina plant at Gove by 1971 with an initial capacity of 500,000 metric tons per annum.

An agreement was signed in Perth in December 1968 with the Western Australian Government for the development of a bauxite/alumina project in the Admiralty Gulf area. The company involved has an option to submit proposals to the State Government before the end of 1969, for all the facilities required for bauxite mining and alumina refining.

Alumina

An alumina refinery with a capacity of 600,000 tons per annum at Gladstone, Queensland, which was completed at a cost of approximately $115 million, was commissioned in March 1967. A $45 million expansion programme was completed at the end of 1968, increasing the capacity of the refinery to 900,000 tons per annum; the plant will be further expanded to 1,275,000 tons yearly by mid-1971 and is scheduled to have an eventual capacity of 1,800,000 tons per annum. Plans were also announced to increase the capacity of the alumina refinery at Kwinana, Western Australia, from 620,000 metric tons to 830,000 metric tons per annum by the end of 1969 and further to 1,040,000 metric tons by the later half of 1970. Bauxite supplies for the Kwinana refinery are obtained from deposits 28 miles away at Jarrahdale, Western Australia, the reserves of which were recently re-assessed from 200 million tons to 500 million tons.

Aluminium

Initial construction of an aluminium smelter with a capacity of 50,000 tons per annum at Kurri Kurri near Newcastle, New South Wales, was commenced in 1967 for completion in 1969. An aluminium powder and paste plant, capable of supplying the whole of Australia's needs, was commissioned in 1968 at Bell Bay, Tasmania. A letter of intent has been received by the Western Australian Government regarding the possible establishment of an aluminium smelter at Kwinana in possibly ten to twelve years.

Copper

A $130 million expansion programme at Mount Isa was completed in 1966 with the commissioning of a new shaft and concentration plant. During the development period when lower grade ore was being extracted, the Mount Isa output was supplemented by ore from the Young Australia mine, fifty miles south of Cloncurry, Queensland, where mining operations were terminated at the end of 1967.

A new copper-gold ore body, the Warrego Mine, is being developed near Tennant Creek, Northern Territory. The first stage of development, which will cost $10 million, will have an installed mining capacity of 400,000 tons of ore per annum.

Since the beginning of 1967 the Australian Producers' price has been adjusted regularly to reflect movements in the London Metal Exchange daily settlement price, the price at the end of January 1969 being 53 cents per pound ($1,187.2 per ton) after reaching $1,350 per ton during February to April 1968.

Iron ore

During 1968, iron ore production expanded by 54 per cent with the largest increase in production being in Western Australia.

Substantial new commitments have been made with the Western Australian Government by the company currently mining at Mount Tom Price to develop the Paraburdoo iron ore deposits, 35 miles south of Mount Tom Price. In addition this company must be ready to produce iron ore from Paraburdoo at an annual rate of not less than 1 million tons between 1974–76. If the company is successful in finding world markets for metallised agglomerates, it is committed to produce 1 million tons by the end of 1972, 2 million tons by the end of 1977 and 3 million tons by the end of 1980.

The consortium has contracted to supply an additional 37,500,000 tons of iron ore to Japan from 1971 from the deposits at Mount Whaleback, Western Australia. In signing this contract, the consortium concerned agreed to deepen the harbour at Port Hedland so that vessels of 100,000 tons dwt could be used.

Total Australian iron ore contracts with Japanese steel mills now amount to about 400 million tons valued at over $3,000 million.

Lead and zinc

At Mount Isa the majority of projects associated with the K57 shaft were completed and production of lead in bullion rose by 15 per cent to 117,000 tons in 1968.

At the zinc refinery at Risdon, Tasmania, a fluid bed roaster is being installed as part of a programme to replace the present hearth and flash roasters. The same company has a prospect at Beltana, South Australia, where 730,000 tons of silicate ore have been proved assaying 37 per cent zinc and 97,000 tons assaying 24 per cent zinc.

Following the commissioning of a slag fuming plant at Port Pirie, plans to recover zinc from residue dumps at Mount Isa and Risdon have been announced.

During 1968 production was restricted by an industrial dispute at mines at Broken Hill.

Black coal

There has been a significant revival in the Australian black coal industry in recent years as a result of increased exports and increased consumption of black coal in iron and steel production and electricity generation. These increases have more than balanced reduced consumption in some applications due to competition from fuel oil.

The expansion of the export trade has been of major significance. In 1955 exports were about 200,000 tons valued at about $1.7 million; in 1968 exports were 12.1 million tons valued at $103.5 million. These increased exports have been almost wholly to Japan for use in the iron and steel industry. As a result of this increased demand, new mines have been opened and others are under development in Queensland and New South Wales, and many established mines are being expanded. Exploration for coal has been stimulated and further rich deposits of coking coal have been located in Queensland.

Petroleum

Developments in the last few years were reviewed in previous issues of the Year Book, and the following is a summary of developments in 1968.

Australia now has seven proved commercial oil-fields. Moonie and Alton in Queensland began production in 1964 and 1966, and the Barrow Island field, Western Australia, was inaugurated in 1967. Off-shore Victoria, in the Gippsland Shelf, commercially producible oil has been discovered in the Kingfish, Halibut, Marlin and Barracouta fileds, and production from this area to the mainland is scheduled for early 1970.

Commercial production of natural gas on a substantial scale is now a reality. Construction of pipe-lines for the supply of natural gas and natural gas liquids from the Barracouta and Marlin fields to Melbourne has been completed. A 480-mile long 22-inch line from the Gidgealpa-Moomba fields to Adelaide is being constructed, and completion is expected in 1969. A 280-mile line from the Roma gas fields to Brisbane has been completed.

The provisional figure for footage drilled in petroleum exploration and development in 1968 was 1,106,804 feet, the second highest figure for any one year. Some 645,941 feet (58.4 per cent) of this total was attributed to exploration drilling. A tentative total of 226 wells were completed, of which ninety were exploration wells. Of these exploration wells, five were completed as potential producers, and nine had hydrocarbon shows.

A notable feature of 1968 was that off-shore drilling accounted for some 312,613 feet. This reflects the beginning of development drilling in the offshore Gippsland Shelf fields.

Nickel

Significant discoveries of nickel have been made near Kambalda, Western Australia. Mining operations at Kambalda commenced in mid-1967. Shipments of ore are being made according to a contract to sell 40,000 tons of contained nickel over ten years to Japan and Canada for refining at a rate of 1,500 tons of contained nickel per year. An agreement with the Western Australian Government providing for the erection of a refinery at Kwinana by 1971, with a minimum annual production capacity of 15,000 tons of metal, was signed in January 1968. Plans to begin mining and concentrating nickel ore from Scotia, Western Australia, about August 1969 were announced in November 1968. Exploration activities continued in the Kalgoorlie area and Blackstone Ranges in Western Australia and near Rockhampton and Greenvale in Queensland.

Phosphate

Major deposits of phosphate rock were discovered during 1966 near Duchess and Lady Annie in north-west Queensland. The deposits are large by world standards, and feasibility studies are still in progress. Survey work has finished on a possible railway route between Lady Annie and the Gulf of Carpentaria, 800 miles away. Lady Annie is likely to be the first deposit developed. Transport and port facilities will be key factors in determining whether the project is to be undertaken.

CHAPTER 26

MANUFACTURING INDUSTRY

Further detail on the subjects dealt with in this chapter is contained in the annual printed bulletins *Manufacturing Industry* and *Manufacturing Commodities*, formerly *Secondary Industries*, Parts I and II. Information is also published, as soon as the data can be prepared, in a series of thirty-five annual mimeographed bulletins, *Manufacturing Industries*, each relating to a particular industry or group of industries. Details of the industries covered are contained in Statistical and other official publications of Australia of the Miscellaneous chapter. Advance annual information is published in mimeographed form in *A Summary of Principal Statistics of Factories* and in *Principal Factory Products*. Current information on factory products is available in the *Quarterly Summary of Australian Statistics*, the *Monthly Review of Business Statistics*, the *Digest of Current Economics Statistics*, and the *Monthly Bulletin of Production Statistics*. A preliminary annual statement (*Factory Statistics*) and a monthly statement (*Production Statistics*) are also issued.

In addition to the above-mentioned publications, there is also a series of fifty-two *Monthly Production Summaries*, each relating to the production of a particular commodity or group of commodities (*see* reference above to Statistical publications).

The annual mimeographed bulletin *Indexes of Factory Production* deals comprehensively with this subject, which is treated only in summarised fashion on pages 1064–5.

Introduction

A complete statistical account of the growth of the manufacturing industry in Australia cannot be given, as the necessary statistics were not collected by the several States on a definite and uniform basis prior to 1906. A standard classification of manufacturing industries was formulated at a conference of Australian statisticians in 1902 and adopted by all States in 1906, and figures on this basis were prepared for 1907 and subsequent years.

An historical summary of the development of the manufacturing industry in Australia since 1901 is contained in earlier issues of the Year Book (*see* No. 51, pages 143–4).

Decentralisation of manufacturing industries

The decentralisation of secondary industries, and the steps taken by Commonwealth and State Governments towards its development, are referred to in previous issues of the Year Book (*see* No. 51, page 144).

Bounties on manufacture

Bounties are paid by the Commonwealth Government to encourage local manufacture of certain products. The statutory provisions usually fix a term of operation of the bounty, provide for payment at a rate varying according to changes in the corresponding customs duty, specify the annual maximum amount of bounty payable, and require the bounty to be withheld or reduced if a manufacturer's net profit in production of the commodity exceeds a certain rate, or if rates of wages and conditions of employment in production of the commodity do not conform to prescribed standards. (*See* Chapter 19, Public Finance for products on which bounties are paid.)

Standardisation

The Commonwealth Scientific and Industrial Research Organization has functions concerned with the improvement of efficiency in industrial operations. For further particulars *see* the chapter Education, Cultural Activities, and Research of this Year Book.

The Standards Association of Australia is the organisation responsible for industrial standardisation on a national basis. It issues Australian standards for materials and products and standard codes of practice.

Formed as the Australian Commonwealth Engineering Standards Association in 1922, it was reconstituted as the Standards Association of Australia in 1929, and was incorporated by Royal Charter in 1950. It is an independent body having the full recognition and support of the Commonwealth and State Governments and of industry. Half its funds are provided by Commonwealth

Government grant, the remainder coming primarily from membership subscriptions and from sale of publications. Organisations, companies, and individuals are eligible for subscribing membership.

The Association is controlled by a Council comprising representatives from Commonwealth and State Governments and their departments, from associations of manufacturing and commercial interests, and from professional institutions. Standards are prepared by committees composed of expert representatives from the interests associated with the subjects under consideration. This assistance is on a voluntary basis.

Preparation of standards is undertaken in response to requests from industrial associations or firms or from government departments. Standards may relate to one or more of several aspects of industrial practice such as terminology, test methods, dimensions, specifications of performance and quality of products, and safety or design codes. In general, standards derive authority from voluntary adoption based on their intrinsic merit, but in special cases where safety of life or property is involved, they may have compulsory application through statutory reference. The Association is the owner of a registered certification trade mark covering conformity of products to standards.

The Association has international affiliations and is a member, representing Australia, of the International Organization for Standardization (ISO) and of the International Electrotechnical Commission (IEC). Close links are maintained with overseas standards organisations, and the Association acts as Australian agent for the procurement of ISO and IEC publications and the standards of other countries.

The Association has two specialised libraries, one in Sydney and one in Melbourne, containing the national standards of all countries with standards organisations. These libraries provide necessary material for committee work and a free information service to those concerned with standards.

The headquarters office of the Association is in Sydney, and there is a major branch office in Melbourne. Branch offices are located also in other capital cities and at Newcastle, New South Wales.

The National Association of Testing Authorities organises testing facilities throughout Australia to serve private and governmental needs.

Membership is open to authorities whose testing laboratories conform to the standards of staffing and operation defined by the Association. Testing authorities may register their laboratories voluntarily. The Association assesses the competence of the laboratories and ensures that their standards of competence are maintained. Certificates of test issued by registered laboratories may be endorsed in the name of the Association. NATA endorsed test certificates are generally accepted by governmental, industrial and commercial interests.

Laboratories are registered for performance of specific tests in the fields of metrology, mechanical testing, electrical testing, optics and photometry, non-destructive testing, heat and temperature measurement, chemical testing, biological testing, and acoustic and vibration measurement. At the end of 1968 there were 695 laboratories registered with the Association, which had a further seventy applications for registration before it.

The Industrial Design Council of Australia was established in June 1958 for the purpose of encouraging better design in Australian-made goods and fostering an appreciation of good design throughout the community. It has a membership fully representative of industry, commerce and government, together with designers and educationists, and is financed by donations from industry and by Commonwealth grants. The Council is responsible for the Australian Design Index which provides a detailed, illustrated record of well-designed Australian products. A Record of Designers has been set up to register information about industrial designers and their work. The Council is also concerned, in co-operation with education authorities, with raising the standard of training in industrial design. For further particulars *see* Year Book No. 51, page 145.

Definitions in factory statistics

The statistics relating to factories have been compiled from tabulations made by the Deputy Commonwealth Statisticians in the several States from returns supplied to them annually by manufacturers in accordance with the statistical Acts of the States and the Commonwealth. A return must be supplied in respect of every *factory*, which is defined for this purpose as an establishment where four or more persons are employed or where power (other than manual) is used in any manufacturing process. This definition includes factories in educational and charitable institutions, reformatories, and other public institutions (except penitentiaries), but does not cover smallgoods makers, laundries, photography studios, florists and seedsmen, or most abattoirs.

If a manufacturing business is conducted in conjunction with any other activity, particulars relating to the manufacturing section only are included in the statistics. Where two or more industries are conducted in the same establishment, a separate return is obtained for each industry wherever practicable.

Manufacturers are requested to state in their returns particulars of the number, age, etc. of their employees, salaries and wages paid, the value of premises and equipment, the horse-power of machinery, the value of raw materials (including containers), tools replaced, etc., the values and in most cases the quantities of fuel used, and quantities and values of principal materials used and articles produced. The returns obtained from manufacturers are not intended to show a complete record of the income and expenditure of factories nor to show the profits or losses of factories collectively or individually.

Persons employed in the manufacturing activities of the factory only are counted as factory employees. The figures relating to employment therefore include working proprietors as well as out-workers, but *exclude* all those engaged in selling and distribution such as salesmen, travellers, collectors, carters engaged solely on outward delivery of manufactured goods, and retailing storemen.

The *average number of persons* employed is quoted on two different bases, the average during the period of operation and the average over the whole year. Of these, the former is simply the aggregate of the average number of persons employed in each factory during its period of operation (whether the whole or only part of the year). This average is used only in respect of details relating to classification according to the number of persons employed. The latter, which is used in all other instances, is calculated by reducing the average number working in the factories (irrespective of period of operation) to the equivalent number working for a full year.

Working proprietors are included in all employment figures other than those relating to monthly employment and age dissections, but salaries and wages paid in all cases exclude drawings by working proprietors.

Value of materials used includes also the value of stores used, containers, tools replaced, and materials used in repairs to plant.

Value of fuel, etc., used includes also the cost of power and light used, lubricants and water.

The *value of factory output* is the value of the goods manufactured or their value after passing through the particular process of manufacture concerned, and includes the amount received for repair work, work done on commission and receipts for other factory work. The basis of valuation of the output is the selling value of the finished articles at the factory, exclusive of all delivery costs and charges and excise duties, but inclusive of bounty and subsidy payments to the manufacturer. In the special case of government factories and workshops, the value of output is, in most cases, estimated by adding ten per cent to the value of materials and fuel used and other factory costs, including salaries and wages paid.

The *value of production* is the value added to materials by the process of manufacture. It is calculated by deducting from the value of factory output the value (at the factory) of the materials used, containers and packing, power, fuel and light used, tools replaced, and materials used in repairs to plant (but not depreciation charges). In the process of manufacture many goods are treated in several industries, the output from one becoming the material for another, so that such commodities are counted more than once in the aggregate value of output and of materials. Examples are raw sugar passing from the mills to the refinery, metals from the smelters which become materials in establishments concerned in the production of metal goods, timber from the sawmills used in furniture factories and in joinery, and synthetic resins from chemical works used to make plastic products. On the other hand, the aggregate value of production is assessed without duplication, the value added by each industry being taken into account once only. For this reason, the value of production, and not the value of output, is used as a measure of activity in the manufacturing industries as a whole.

The *rated horse-power of engines used* for factories other than central electric stations relates to the rated horse-power of engines ordinarily in use.

Statistics relating to factory activity in the Australian Capital Territory and Northern Territory are included in the figures contained in this chapter as from 1 July 1964, unless otherwise indicated.

A standard classification of manufacturing industries is used in compiling statistical data relating to factories in Australia. It is designed in accordance with decisions of the 1945 Conference of Statisticians, and represents a revision and extension of a classification which was introduced in 1930–31, replacing the revised versions of the original classification formulated in 1902.

Owing to limitations of space, details published in general tables in this chapter are confined either to the sixteen classes of industry or to total factory activity. Some particulars of certain of the sub-classes shown below are published in the latter portion of this chapter, and full details for all sub-classes may be found in the bulletin *Manufacturing Industry* (previously entitled *Secondary Industries, Part I—Factory and Building Operations*).

The classes and sub-classes in the current classification of factories are as follows.

CLASSIFICATION OF FACTORIES

CLASS 1. TREATMENT OF NON-METALLIFEROUS MINE AND QUARRY PRODUCTS

1. Coke works
2. Briquetting and pulverised coal
3. Carbide
4. Lime, plaster of paris, asphalt
5. Fibrous plaster and products
6. Marble, slate, etc.
7. Cement, portland
8. Asbestos cement sheets and mouldings
9. Other cement goods
10. Other

CLASS 2. BRICKS, POTTERY, GLASS, ETC.

1. Bricks and tiles
2. Earthenware, china, porcelain, and terracotta
3. Glass (other than bottles)
4. Glass bottles
5. Other

CLASS 3. CHEMICALS, DYES, EXPLOSIVES, PAINTS, OILS, GREASE

1. Industrial and heavy chemicals and acids
2. Pharmaceutical and toilet preparations
3. Explosives (including fireworks)
4. White lead, paints and varnish
5. Oils, vegetable
6. Oils, mineral
7. Oils, animal
8. Boiling-down, tallow refining
9. Soap and candles
10. Chemical fertilisers
11. Inks, polishes, etc.
12. Matches
13. Other

CLASS 4. INDUSTRIAL METALS, MACHINES, CONVEYANCES

1. Smelting, converting, refining, rolling of iron and steel
2. Foundries (ferrous)
3. Plant, equipment and machinery, including machine tools
4. Other engineering
5. Extracting and refining of other metals; alloys
6. Electrical machinery, cables and apparatus

7–16. Construction and repair of vehicles (10 groups)

17, 18. Ship and boat building and repairing, marine engineering (government and other)

19. Cutlery and small hand tools
20. Agricultural machines and implements

Non-ferrous metals—

21. Rolling and extrusion
22. Founding, casting, etc.

24. Sheet metal working, pressing and stamping
25. Pipes, tubes and fittings—Ferrous
26. Wire and wire working (including nails)
27. Stoves, ovens and ranges
28. Gas fittings and meters
29. Lead mills
30. Sewing machines
31. Arms, ammunition (excluding explosives)
32. Wireless and amplifying apparatus
33. Other metal works

CLASS 5. PRECIOUS METALS, JEWELLERY, PLATE

1. Jewellery
2. Watches and clocks (including repairs)
3. Electroplating (gold, silver, chromium, etc.)

CLASS 6. TEXTILES AND TEXTILE GOODS (NOT DRESS)

1. Cotton ginning
2. Cotton spinning and weaving
3. Wool—Carding, spinning, weaving
4. Hosiery and other knitted goods
5. Silk, natural
6. Rayon, acrylics and other synthetic fibres
7. Flax mills
8. Rope and cordage
9. Canvas goods, tents, tarpaulins, etc.
10. Bags and sacks
11. Textile dyeing, printing and finishing
12. Other

CLASS 7. SKINS AND LEATHER (NOT CLOTHING OR FOOTWEAR)

1. Furriers and fur-dressing
2. Woolscouring and fellmongery
3. Tanning, currying and leather-dressing
4. Saddlery, harness and whips
5. Machine belting (leather or other)
6. Bags, trunks and other goods of leather and leather substitutes

CLASS 8. CLOTHING (EXCEPT KNITTED)

1. Tailoring and ready-made clothing
2. Waterproof and oilskin clothing
3. Dressmaking, hemstitching
4. Millinery
5. Shirts, collars, underclothing
6. Foundation garments
7. Handkerchiefs, ties and scarves
8. Hats and caps
9. Gloves
10. Boots and shoes (not rubber)
11. Boot and shoe repairing
12. Boot and shoe accessories
13. Umbrellas and walking sticks
14. Dyeworks and cleaning (including renovating and repairing)
15. Other

CLASS 9. FOOD, DRINK AND TOBACCO

1. Flour-milling
2. Cereal foods and starch
3. Animal and bird foods
4. Chaffcutting and corncrushing
5. Bakeries (including cakes and pastry)
6. Biscuits
7. Sugar mills
8. Sugar refining
9. Confectionery (including chocolate and icing sugar)
10. Jam, fruit and vegetable canning
11. Pickles, sauces, vinegar
12. Bacon curing
13. Butter factories
14. Cheese factories
15. Condensed and dried milk factories
16. Margarine

CLASS 9. FOOD, DRINK AND TOBACCO—*continued*

17. Meat and fish preserving
18. Condiments, coffee, spices
19. Ice and refrigerating
20. Salt
21. Aerated waters, cordials, etc.
22. Breweries
23. Distilleries
24. Winemaking
25. Cider and perry
26. Malting
27. Bottling
28. Tobacco, cigars, cigarettes, snuff
29. Dehydrated fruit and vegetables
30. Ice cream
31. Sausage casings
32. Arrowroot
33. Other

CLASS 10. SAWMILLS, JOINERY, BOXES, ETC., WOOD TURNING AND CARVING

1. Sawmills
2. Plywood mills (including veneers)
3. Bark mills
4. Joinery
5. Cooperage
6. Boxes and cases
7. Woodturning, woodcarving, etc.
8. Basketware and wickerware (including seagrass and bamboo furniture)
9. Perambulators (including pushers and strollers)
10. Wall and ceiling boards (not plaster or cement)
11. Other

CLASS 11. FURNITURE OF WOOD, BEDDING, ETC.

1. Cabinet and furniture making (including billiard tables and upholstery)
2. Bedding and mattresses (not wire)
3. Furnishing drapery
4. Picture frames
5. Blinds

CLASS 12. PAPER, STATIONERY, PRINTING, BOOKBINDING, ETC.

1. Newspapers and periodicals

   Printing—
2. Government
3. General, including bookbinding
4. Manufactured stationery
5. Stereotyping, electrotyping
6. Process and photo engraving
7. Cardboard boxes, cartons and containers
8. Paper bags
9. Paper making
10. Pencils, penholders, chalks, crayons
11. Other

CLASS 13. RUBBER

1. Rubber goods (including tyres made)
2. Tyre retreading and repairing

CLASS 14. MUSICAL INSTRUMENTS

1. Gramophones and gramophone records
2. Pianos, piano-players, organs
3. Other

CLASS 15. MISCELLANEOUS PRODUCTS

1. Linoleum, leather-cloth, oil-cloth, etc.
2. Bone, horn, ivory, and shell
3. Plastic moulding and products
4. Brooms and brushes
5. Optical instruments and appliances
6. Surgical and other scientific instruments and appliances
7. Photographic material (including developing and printing)
8. Toys, games and sports requisites
9. Artificial flowers
10. Other

CLASS 16. HEAT, LIGHT, AND POWER

1–3. Electric light and power
4–6. Gas works

Factory development since 1901, Australia

FACTORIES: AUSTRALIA(*a*), 1901 TO 1967-68

Year	*Factories*	*Employment* (*b*)	*Salaries and wages paid* (*c*)	*Value of—*				
				Materials and fuel used	*Output*	*Production* (*d*)	*Land and buildings* (*e*)	*Plant and machinery* (*e*)
	No.	'000	$'000	$'000	$'000	$'000	$'000	$'000
1901	11,143	198	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1911	14,455	312	55,056	163,526	266,044	102,518	65,402	63,032
1920–21	17,113	367	125,864	427,118	647,986	220,868	121,662	137,310
1930–31	21,751	339	124,910	344,978	581,598	236,620	224,422	248,996
1940–41	27,300	650	275,838	773,762	1,289,590	515,828	288,188	322,712
1950–51	43,147	969	983,436	2,613,926	4,301,670	1,687,744	605,570	673,230
1960–61	57,782	1,145	2,289,230	6,115,930	10,465,765	4,349,835	2,389,140	2,785,565
1963–64	59,375	1,210	2,651,620	7,372,682	12,642,686	5,270,003	3,204,685	3,480,673
1964–65	61,042	1,269	2,993,709	8,140,600	14,037,355	5,896,754	3,505,859	3,766,253
1965–66	61,686	1,294	3,162,769	8,437,958	14,689,819	6,251,861	3,776,590	4,154,652
1966–67	62,500	1,309	3,407,683	9,015,844	15,892,845	6,877,001	4,061,193	4,706,843
1967–68	62,954	1,331	3,665,902	9,663,217	17,094,070	7,430,853	4,303,156	4,962,203

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory. (*b*) 1901 and 1911—average employment during period of operation. Later years relate to average employment over whole year. Working proprietors are included in all years. (*c*) Excludes amounts drawn by working proprietors. (*d*) Value added in process of manufacture (i.e. value of output less value of materials and fuel, etc. used). (*e*) Depreciated or book values at 30 June. Includes estimated values of rented premises and machinery.

Number of factories

Number in each State and Territory

FACTORIES: NUMBER, STATES AND TERRITORIES, 1963-64 TO 1967-68

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust. (a)*
1963–64 . .	23,642	17,597	5,955	5,826	4,609	1,746	n.a.	n.a.	59,375
1964–65 . .	24,368	17,925	5,962	5,887	4,734	1,805	174	187	61,042
1965–66 . .	24,531	17,980	6,010	6,065	4,906	1,792	185	217	61,686
1966–67 . .	24,849	18,053	6,013	6,222	5,167	1,771	187	238	62,500
1967–68 . .	24,884	18,030	6,154	6,255	5,404	1,797	188	242	62,954

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

Number by class of industry

The next tables show the number of factories in Australia classified to the industrial classes agreed upon by the Conference of Statisticians in 1930.

FACTORIES: NUMBER, BY CLASS OF INDUSTRY, AUSTRALIA(*a*), 1963-64 TO 1967-68

Class of industry	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
1. Treatment of non-metalliferous mine and quarry products	1,517	1,557	1,611	1,615	1,635
2. Bricks, pottery, glass, etc.	692	689	678	676	659
3. Chemicals, dyes, explosives, paints, oils, grease	1,303	1,325	1,354	1,379	1,379
4. Industrial metals, machines, conveyances .	25,415	26,665	27,549	28,424	29,213
5. Precious metals, jewellery, plate . . .	927	980	970	975	984
6. Textiles and textile goods (not dress) . .	1,358	1,373	1,360	1,329	1,332
7. Skins and leather (not clothing or footwear)	645	639	631	616	603
8. Clothing (except knitted)	7,447	7,450	7,271	7,141	6,965
9. Food, drink and tobacco	7,034	7,060	6,938	6,834	6,689
10. Sawmills, joinery, boxes, etc., wood turning and carving	5,422	5,454	5,402	5,414	5,336
11. Furniture of wood, bedding, etc. . .	2,181	2,210	2,200	2,260	2,275
12. Paper, stationery, printing, bookbinding, etc.	2,828	2,937	2,971	3,052	3,085
13. Rubber	674	705	711	685	648
14. Musical instruments	82	76	73	69	70
15. Miscellaneous products	1,494	1,575	1,627	1,701	1,746
Total, classes 1 to 15	*59,019*	*60,695*	*61,346*	*62,170*	*62,619*
16. Heat, light and power	356	347	340	330	335
Total, all classes	**59,375**	**61,042**	**61,686**	**62,500**	**62,954**

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

FACTORIES, BY INDUSTRY

AUSTRALIA, 1967-68

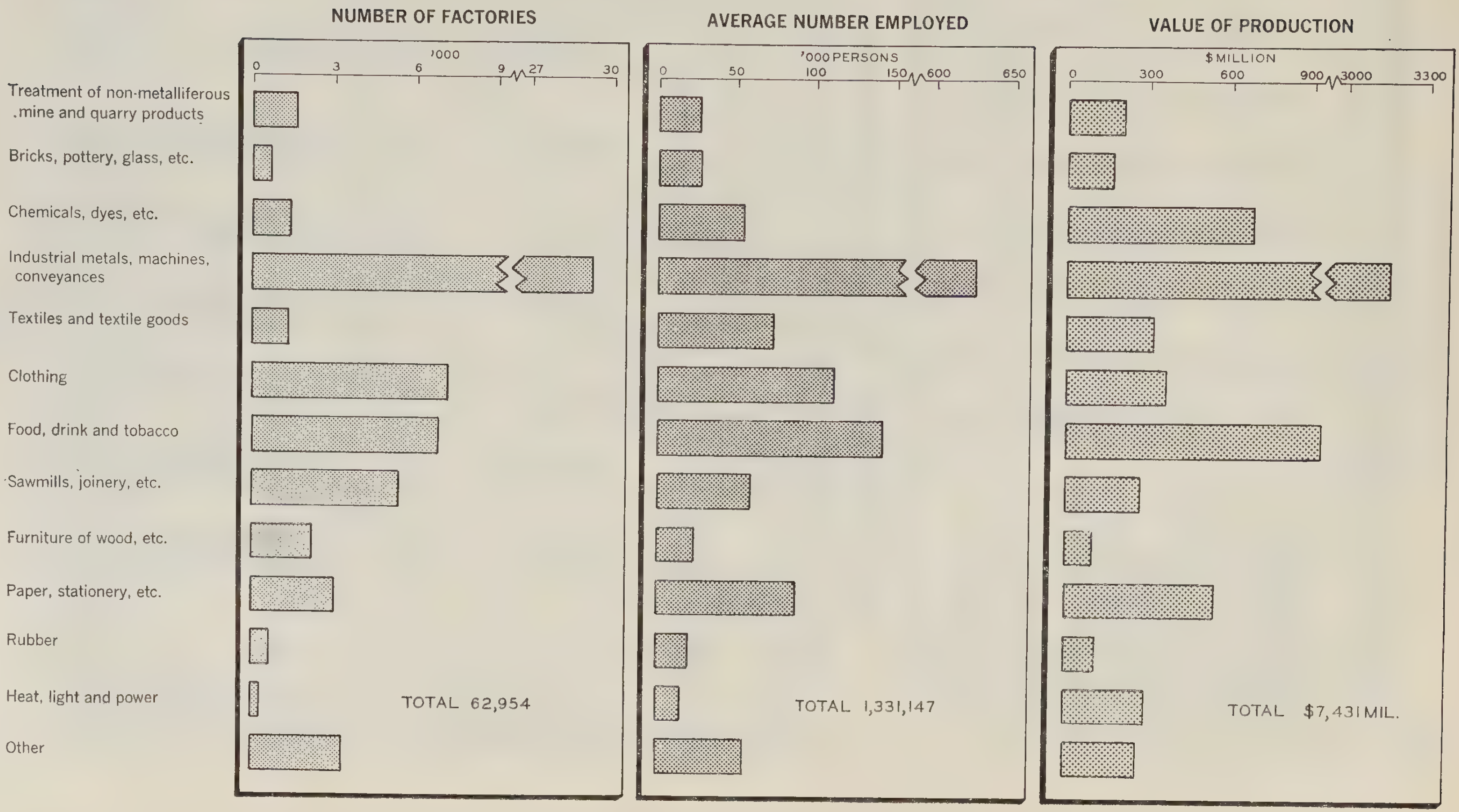

PLATE 52

FACTORIES : NUMBER, BY CLASS OF INDUSTRY, STATES AND TERRITORIES, 1967-68

Class of industry	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1. Treatment of non-metalliferous mine and quarry products	532	478	154	210	173	58	17	13	1,635
2. Bricks, pottery, glass, etc.	298	172	53	61	47	21	1	6	659
3. Chemicals, dyes, explosives, paints, oils, grease	638	404	99	109	92	31	5	1	1,379
4. Industrial metals, machines, conveyances	11,692	7,683	2,793	3,294	2,824	698	103	126	29,213
5. Precious metals, jewellery, plate	389	255	44	177	94	19	..	6	984
6. Textiles and textile goods (not dress)	432	742	33	64	37	24	..	..	1,332
7. Skins and leather (not clothing or footwear)	282	213	42	37	24	5	..	..	603
8. Clothing (except knitted)	3,157	2,331	532	511	327	82	7	18	6,965
9. Food, drink and tobacco	2,319	1,834	889	697	629	279	23	19	6,689
10. Sawmills, joinery, boxes, etc., wood turning and carving	1,887	1,371	711	442	479	403	15	28	5,336
11. Furniture of wood, bedding, etc.	830	641	303	209	218	65	2	7	2,275
12. Paper, stationery, printing, bookbinding, etc.	1,292	1,120	238	202	167	50	4	12	3,085
13. Rubber	239	166	111	52	49	19	6	6	648
14. Musical instruments	33	16	5	9	7	..	..	..	70
15. Miscellaneous products	781	559	92	149	145	20	..	..	1,746
Total, classes 1 to 15	*24,801*	*17,985*	*6,099*	*6,223*	*5,312*	*1,774*	*183*	*242*	*62,619*
16. Heat, light and power	83	45	55	32	92	23	5	..	335
Total, all classes	**24,884**	**18,030**	**6,154**	**6,255**	**5,404**	**1,797**	**188**	**242**	**62,954**

Classification of factories by number of persons employed

The classification of factories by size in the following tables on pages 1046–7 is based on the average weekly number of *persons employed during the period of operation* (including working proprietors).

FACTORIES: NUMBER OF FACTORIES AND PERSONS EMPLOYED, BY SIZE OF FACTORY STATES AND TERRITORIES, 1967-68

Persons employed	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
NUMBER OF FACTORIES									
Under 4	10,363	5,896	2,103	3,068	2,558	728	67	72	24,855
4	1,935	1,535	616	472	482	162	20	29	5,251
5 to 10	5,680	4,384	1,591	1,207	1,126	430	63	63	14,544
11 to 20	3,033	2,564	831	681	559	225	25	46	7,964
21 to 50	2,217	1,994	569	459	440	156	10	23	5,868
51 to 100	829	825	229	193	151	44	3	5	2,279
101 to 200	447	462	114	99	54	28	..	1	1,205
201 to 300	140	156	53	21	18	12	..	2	402
301 to 400	74	73	14	17	5	1	..	..	184
401 to 500	42	44	15	11	5	2	..	..	119
501 to 750	54	54	10	9	3	2	..	1	133
751 to 1,000	25	16	4	6	1	3	..	..	55
Over 1,000	45	27	5	12	2	4	..	..	95
Total	**24,884**	**18,030**	**6,154**	**6,255**	**5,404**	**1,797**	**188**	**242**	**62,954**
NUMBER EMPLOYED DURING PERIOD OF OPERATION									
Under 4	19,155	11,624	4,274	5,483	4,796	1,380	123	160	46,995
4	7,740	6,140	2,464	1,888	1,928	648	80	116	21,004
5 to 10	39,384	30,744	11,077	8,363	7,758	2,949	429	415	101,119
11 to 20	44,256	37,579	12,208	9,960	7,999	3,248	345	678	116,273
21 to 50	69,720	62,871	17,715	14,452	13,616	5,004	356	719	184,453
51 to 100	57,837	57,913	15,937	13,550	10,711	3,183	201	348	159,680
101 to 200	62,719	65,227	16,221	13,983	7,511	3,911	..	106	169,678
201 to 300	33,409	38,070	12,727	5,185	4,270	2,722	..	483	96,866
301 to 400	25.902	25,405	4,982	5,766	1,648	360	..	..	64,063
401 to 500	18.609	19,832	6,719	4,828	2,177	881	..	..	53,046
501 to 750	32,993	32,850	6,648	5,219	1,798	1,084	..	708	81,300
751 to 1,000	21,595	13,610	3,268	5,072	835	2,595	..	..	46,975
Over 1,000	100,417	50,996	7,204	28,322	3,743	7,471	..	..	198,153
Total	**533,736**	**452,861**	**121,444**	**122,071**	**68,790**	**35,436**	**1,534**	**3,733**	**1,339,605**
Average per factory	21.45	25.12	19.73	19.52	12.73	19.72	8.16	15.43	21.28

FACTORIES: NUMBER OF FACTORIES AND PERSONS EMPLOYED, BY SIZE OF FACTORY AUSTRALIA(*a*), 1963-64 TO 1967-68

	Factories employing on the average—							
	20 and under		*21 to 100*		*101 and upwards*		*Total*	
Year	*Factories*	*Persons employed*	*Factories*	*Persons employed*	*Factories*	*Persons employed*	*Factories*	*Persons employed*
1963-64—								
Number	49,952	266,153	7,477	315,655	1,946	635,712	59,375	1,217,520
Average per factory	..	5.33	..	42.22	..	326.68	..	20.51
1964-65—								
Number	51,202	273,427	7,784	327,643	2,056	676,649	61,042	1,277,719
Average per factory	..	5.34	..	42.09	..	329.11	..	20.93
1965-66—								
Number	51,603	279,440	7,978	337,171	2,105	685,812	61,686	1,302,423
Average per factory	..	5.42	..	42.26	..	325.80	..	21.11
1966-67—								
Number	52,313	284,380	8,047	339,889	2,140	693,791	62,500	1,318,060
Average per factory	..	5.44	..	42.24	..	324.20	..	21.09
1967-68—								
Number	52,614	285,391	8,147	344,133	2,193	710,081	62,954	1,339,605
Average per factory	..	5.42	..	42.24	..	323.79	..	21.28

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

Classes of industry

FACTORIES: NUMBER OF FACTORIES AND PERSONS EMPLOYED, BY SIZE OF FACTORY AND CLASS OF INDUSTRY, AUSTRALIA, 1967-68

	Factories employing on the average—							
	20 and under		*21 to 100*		*101 and upwards*		*Total*	
Class of industry	*Factories*	*Persons employed*	*Factories*	*Persons employed*	*Factories*	*Persons employed*	*Factories*	*Persons employed*
1. Treatment of non-metalliferous mine and quarry products	1,425	7,594	163	6,822	47	12,418	1,635	26,834
2. Bricks, pottery, glass, etc.	406	3,227	195	8,941	58	15,075	659	27,243
3. Chemicals, dyes, explosives, paints, oils, grease	939	5,979	310	14,238	130	34,983	1,379	55,200
4. Industrial metals, machines conveyances	25,267	128,471	3,035	125,830	911	374,652	29,213	628,953
5. Precious metals, jewellery, plate	926	3,708	54	1,791	4	664	984	6,163
6. Textiles and textile goods (not dress)	780	5,661	379	17,333	173	51,237	1,332	74,231
7. Skins and leather (not clothing or footwear)	462	2,898	124	5,370	17	3,230	603	11,498
8. Clothing (except knitted)	5,699	29,175	1,084	45,930	182	37,159	6,965	112,264
9. Food, drink and tobacco	5,500	30,258	897	39,821	292	76,389	6,689	146,468
10. Sawmills, joinery, boxes, etc., wood turning and carving	4,674	27,888	603	23,354	59	9,854	5,336	61,096
11. Furniture of wood, bedding, etc.	1,965	10,217	285	11,046	25	4,053	2,275	25,316
12. Paper, stationery, printing, bookbinding, etc.	2,290	16,848	640	27,114	155	46,816	3,085	90,778
13. Rubber	558	2,974	54	2,240	36	15,928	648	21,142
14. Musical instruments	60	279	8	346	2	207	70	832
15. Miscellaneous products	1,419	8,960	267	11,680	60	15,052	1,746	35,692
Total, classes 1 to 15	*52,370*	*284,137*	*8,098*	*341,856*	*2,151*	*697,717*	*62,619*	*1,323,710*
16. Heat, light and power	244	1,254	49	2,277	42	12,364	335	15,895
Total, all classes	**52,614**	**285,391**	**8,147**	**344,133**	**2,193**	**710,081**	**62,954**	**1,339,605**

Employment in factories

Number employed

All persons employed in the manufacturing activities of a factory are counted as factory employees. The figures relating to employment, therefore, exclude all those engaged in selling and distribution, such as salesmen, travellers, collectors, carters engaged solely on delivery of manufactured goods, and retailing storemen. The figures, however, do include proprietors who work in their own business, as well as 'out-workers' (*see* page 1050). From 1960–61 the occupational groupings collected have been—(i) working proprietors; (ii) managerial and clerical staff including salaried managers and working directors; (iii) chemists, draughtsmen and other laboratory and research staff; and (iv) foremen and overseers, workers in factory and others, in which were amalgamated the three former groups—(iv) foremen and overseers; (v) skilled and unskilled workers; (vi) carters (excluding delivery only), messengers, and persons working regularly at home.

Statistics of factory employment represent the equivalent average number employed over a full year of fifty-two weeks except for the classification of factories according to size (*see* pages 1046–7), which is based on the average number employed during the period of operation.

Particulars of the numbers employed in Australia, the increase in employment, and the rate per cent of such increase are given in the table below.

FACTORIES: EMPLOYMENT, AUSTRALIA(*a*), 1963-64 TO 1967-68

Year	*Males*			*Females*			*Persons*		
	Number employed	*Increase on preceding year*		*Number employed*	*Increase on preceding year*		*Number employed*	*Increase on preceding year*	
		Number	*Per cent*		*Number*	*Per cent*		*Number*	*Per cent*
1963–64 . .	918,130	29,409	3.31	291,790	12,958	4.65	1,209,920	42,367	3.63
1964–65 . .	957,261	39,131	4.26	311,674	19,884	6.81	1,268,935	59,015	4.88
1965–66 . .	973,411	16,150	1.69	320,412	8,738	2.80	1,293,823	24,888	1.96
1966–67 . .	982,907	9,496	0.98	326,301	5 889	1.84	1,309,208	15,385	1.19
1967–68 . .	998,674	15,767	1.58	332,473	6,172	1.86	1,331,147	21,939	1.65

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

The following table shows the average number of persons employed in manufacturing industries; the percentage for each State and Territory of the total number employed in factories in Australia; and the number so employed per thousand of mean population in each State and Australia.

FACTORIES: EMPLOYMENT, STATES AND TERRITORIES, 1963-64 TO 1967-68

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.(a)*
Average number employed during full year (fifty-two weeks)—									
1963–64 . . .	487,753	413,120	110,696	110,813	55,705	31,833	n.a.	n.a.	1,209,920
1964–65 . . .	508,979	432,413	116,246	116,183	58,097	32,580	1,210	3,227	1,268,935
1965–66 . . .	519,364	439,149	117,581	118,343	60,282	34,315	1,294	3,495	1,293,823
1966–67 . . .	524,054	445,307	117,937	118,220	63,757	34,879	1,423	3,631	1,309,208
1967–68 . . .	531,185	449,945	120,852	121,417	67,335	35,178	1,519	3,716	1,331,147
Percentage of Australian total—									
1963–64 . . .	40.31	34.14	9.15	9.16	4.60	2.63	n.a.	n.a.	100
1964–65 . . .	40.11	34.08	9.16	9.15	4.58	2.57	0.10	0.25	100
1965–66 . . .	40.14	33.94	9.09	9.15	4.66	2.65	0.10	0.27	100
1966–67 . . .	40.03	34.01	9.01	9.03	4.87	2.66	0.11	0.28	100
1967–68 . . .	39.91	33.80	9.08	9.12	5.06	2.64	0.11	0.28	100
Per 1,000 of population—									
1963–64 . . .	120	134	69	108	70	88	n.a.	n.a.	111
1964–65 . . .	123	138	71	110	71	89	23	38	113
1965–66 . . .	123	137	71	109	72	93	23	38	113
1966–67 . . .	123	137	70	107	74	93	25	36	112
1967–68 . . .	122	136	70	108	75	93	25	34	112

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

Rates of increase in employment

The percentage increase on the average number of persons employed in the preceding year is shown below for each State and Territory.

FACTORIES: ANNUAL PERCENTAGE INCREASE OF PERSONS EMPLOYED STATES AND TERRITORIES, 1963-64 TO 1967-68

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.(a)*
1963–64	2.63	3.84	5.43	5.27	4.25	3.51	n.a.	n.a.	3.63
1964–65	4.35	4.67	5.01	4.85	4.29	2.35	n.a.	n.a.	4.88
1965–66	2.04	1.56	1.15	1.86	3.76	5.33	6.94	8.30	1.96
1966–67	0.90	1.40	0.30	−0.10	5.76	1.64	9.97	3.89	1.19
1967–68	1.36	1.04	2.47	2.70	5.61	0.86	6.75	2.34	1.65

(*a*) Before 1 July 1965, excludes Northern Territory and Australian Capital Territory.

Persons employed, by class of industry

FACTORIES: AVERAGE NUMBER OF PERSONS EMPLOYED, BY CLASS OF INDUSTRY, AUSTRALIA(*a*), 1963–64 TO 1967–68

Class of industry	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
1. Treatment of non-metalliferous mine and quarry products	24,704	25,683	26,011	26,104	26,685
2. Bricks, pottery, glass, etc.	25,656	27,002	27,177	26,974	27,171
3. Chemicals, dyes, explosives, paints, oils, grease	49,023	51,498	53,111	54,629	55,053
4. Industrial metals, machines, conveyances .	552,795	588,022	601,637	611,614	626,280
5. Precious metals, jewellery, plate . . .	5,543	5,900	5,926	5,990	6,108
6. Textiles and textile goods (not dress) . .	73,076	75,281	74,708	73,036	73,804
7. Skins and leather (not clothing or footwear)	12,209	12,026	11,807	11,355	11,458
8. Clothing (except knitted)	108,909	110,613	111,793	111,909	111,040
9. Food, drink and tobacco	134,487	138,768	142,153	143,510	144,441
10. Sawmills, joinery, boxes, etc., wood turning and carving	57,650	59,815	60,642	59,976	60,274
11. Furniture of wood, bedding, etc. . .	22,545	23,251	23,740	24,390	25,055
12. Paper, stationery, printing, bookbinding, etc.	79,250	83,692	87,129	89,192	90,563
13. Rubber	20,261	20,813	20,416	20,198	21,111
14. Musical instruments	779	785	764	824	831
15. Miscellaneous products	27,422	30,057	31,154	33,431	35,469
Total, classes 1 to 15	*1,194,309*	*1,253,206*	*1,278,168*	*1,293,132*	*1,315,343*
16. Heat, light and power	15,611	15,729	15,655	16,076	15,804
Total all classes	**1,209,920**	**1,268,935**	**1,293,823**	**1,309,208**	**1,331,147**

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

FACTORIES: AVERAGE NUMBER OF PERSONS EMPLOYED, BY CLASS OF INDUSTRY, STATES AND TERRITORIES, 1967–68

Class of industry(a)	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1. Treatment non-metal. mine, etc. products .	10,388	7,560	3,116	2,255	2,129	888	127	222	26,685
2. Bricks, etc. . .	13,168	7,692	1,979	2,013	1,796	359	12	152	27,171
3. Chemicals, etc.. .	27,318	17,892	2,431	3,253	3,209	920	23	7	55,053
4. Industrial metals, machines, etc. . .	267,936	192,073	47,703	72,643	31,694	12,155	870	1,206	626,280
5. Jewellery, etc. . .	2,376	2,218	365	572	288	47	..	242	6,108
6. Textiles, etc. . .	20,997	43,077	2,157	2,829	758	3,986	..	..	73,804
7. Skins, leather, etc. .	5,074	3,715	1,078	994	549	48	..	..	11,458
8. Clothing, etc. . .	44,418	49,027	8,489	5,162	3,015	726	22	181	111,040
9. Food, drink, etc. .	44,357	44,143	28,420	12,264	9,340	5,413	193	311	144,441
10. Sawmills, etc. . .	19,629	15,724	9,036	5,546	6,084	3,919	78	258	60,274
11. Furniture, etc. . .	9,805	7,167	3,249	2,261	1,840	672	14	47	25,055
12. Paper, stationery, etc.	36,222	30,991	7,477	5,724	3,722	5,314	60	1,053	90,563
13. Rubber . . .	8,202	8,503	1,983	1,724	508	139	15	37	21,111
14. Musical instruments .	540	216	22	24	29	..	..	..	831
15. Miscellaneous . .	15,652	15,060	1,256	2,329	1,010	162	..	..	35,469
Total, classes 1 to 15 .	*526,082*	*445,058*	*118,761*	*119,593*	*65,971*	*34,748*	*1,414*	*3,716*	*1,315,343*
16. Heat, light and power	5,103	4,887	2,091	1,824	1,364	430	105	..	15,804
Total all classes .	**531,185**	**449,945**	**120,852**	**121,417**	**67,335**	**35,178**	**1,519**	**3,716**	**1,331,147**

(*a*) For full titles *see* table above. (*b*) Not available for publication.

Persons employed, by occupational grouping

FACTORIES: AVERAGE NUMBER OF PERSONS EMPLOYED, BY OCCUPATIONAL GROUPING STATES AND TERRITORIES, 1967-68

	Average number of persons employed				
State or Territory	*Working proprietors*	*Managerial and clerical staff, etc.*	*Chemists, draughtsmen etc.*	*Foremen and overseers, workers in factory and others(a)*	*Total*
New South Wales	13,825	78,755	12,183	426,422	531,185
Victoria	12,025	63,164	10,189	364,567	449,945
Queensland	4,690	15,216	1,704	99,242	120,852
South Australia	3,997	16,206	2,787	98,427	121,417
Western Australia	3,455	7,706	914	55,260	67,335
Tasmania	975	4,204	715	29,284	35,178
Northern Territory	88	238	4	1,189	1,519
Australian Capital Territory	156	629	27	2,904	3,716
Total males	32,906	114,791	25,447	825,530	998,674
Total females	6,305	71,327	3,076	251,765	332,473
Total persons	**39,211**	**186,118**	**28,523**	**1,077,295**	**1,331,147**

(*a*) Includes persons working regularly at home.

The term 'outworker' or 'homeworker' has acquired a special meaning in connection with manufacturing industries, and includes only persons to whom work is given out by factories to be done at home. Persons working regularly at home for factories are included in the group foremen, overseers, workers in factory, and others, and separate details are not available.

Monthly employment

The following tables show the number of persons (excluding working proprietors) employed in factories on the last pay-day of each month.

FACTORIES: MONTHLY EMPLOYMENT, BY SEX, AUSTRALIA(*a*), 1963-64 TO 1967-68

EXCLUDING WORKING PROPRIETORS

Month	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
		MALES			
July	867,166	911,211	940,995	944,379	957,444
August	869,030	912,301	940,562	944,066	957,700
September	872,381	914,016	939,023	942,483	958,661
October	875,318	915,883	935,842	943,532	960,240
November	879,265	918,029	938,019	948,409	964,606
December	875,159	917,952	931,923	942,213	957,887
January	884,788	922,676	935,635	948,181	963,059
February	893,400	930,968	942,486	955,604	971,900
March	894,393	934,409	944,702	957,679	975,287
April	897,783	934,496	941,325	957,948	972,438
May	898,809	933,759	941,860	957,356	973,117
June	901,507	933,803	940,563	955,085	973,332

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

FACTORIES: MONTHLY EMPLOYMENT BY SEX, AUSTRALIA(a), 1963–64 TO 1967–68—*continued*

Month	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
			FEMALES		
July	274,312	295,743	310,759	314,479	321,366
August	277,063	297,752	311,629	315,007	322,385
September	279,713	301,106	313,559	315,600	324,271
October	283,778	304,287	314,539	318,251	326,767
November	285,296	305,939	315,070	319,341	327,404
December	282,296	301,987	310,424	314,881	322,358
January	283,279	302,729	310,051	316,345	321,880
February	291,966	310,989	317,691	325,236	329,969
March	293,424	315,493	319,760	327,895	332,943
April	290,823	311,114	314,458	324,889	327,904
May	290,301	309,466	313,345	322,885	327,754
June	290,833	308,583	312,896	322,226	327,719
			PERSONS		
July	1,141,478	1,206,954	1,251,754	1,258,858	1,278,810
August	1,146,093	1,210,053	1,252,191	1,259,073	1,280,085
September	1,152,094	1,215,122	1,252,582	1,258,083	1,282,932
October	1,159,096	1,220,170	1,250,381	1,261,783	1,287,007
November	1,164,561	1,223,968	1,253,089	1,267,750	1,292,010
December	1,157,455	1,219,939	1,242,347	1,257,094	1,280,245
January	1,168,067	1,225,405	1,245,686	1,264,526	1,284,939
February	1,185,366	1,241,957	1,260,177	1,280,840	1,301,869
March	1,187,817	1,249,902	1,264,462	1,285,574	1,308,230
April	1,188,606	1,245,610	1,255,783	1,282,837	1,300,342
May	1,189,110	1,243,225	1,255,205	1,280,241	1,300,871
June	1,192,340	1,242,386	1,253,459	1,277,311	1,301,051

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

FACTORIES: MONTHLY EMPLOYMENT, BY SEX, STATES AND TERRITORIES 1967-68

EXCLUDING WORKING PROPRIETORS

Month	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
				MALES					
July	381,626	304,201	95,428	92,705	51,874	27,492	1,285	2,833	957,444
August	381,666	304,038	95,377	93,023	52,134	27,326	1,295	2,841	957,700
September	382,002	303,848	95,631	93,632	52,189	27,254	1,283	2,822	958,661
October	382,558	304,196	95,508	94,123	52,483	27,241	1,297	2,834	960,240
November	384,700	305,967	94,491	94,803	52,983	27,511	1,279	2,872	964,606
December	383,698	305,555	88,842	94,785	53,093	27,776	1,259	2,879	957,887
January	384,238	306,978	90,170	95,707	53,711	28,103	1,247	2,905	963,059
February	385,876	309,465	93,332	96,910	54,283	27,828	1,294	2,912	971,900
March	386,658	309,861	94,553	97,460	54,666	27,836	1,329	2,924	975 287
April	386,028	307,596	95,174	97,056	54,596	27,740	1,333	2,915	972,438
May	387,003	306,380	95,584	97,355	54,734	27,811	1,358	2,892	973,117
June	386,687	305,729	96,682	97,409	54,902	27,652	1,365	2,906	973 332
				FEMALES					
July	132,225	129,046	21,937	21,146	9,739	6,489	123	661	321,366
August	132,612	129,606	22,125	21,184	9,745	6,311	128	674	322,385
September	133,915	129,987	22,187	21,306	9,894	6,182	125	675	324,271
October	135,200	130,719	22,148	21,614	10,139	6,139	130	678	326,767
November	135,197	131,364	21,830	21,710	10,244	6,233	133	693	327,404
December	132,453	129,851	20,987	21,816	10,143	6,294	126	688	322,358
January	130,931	130,650	20,948	22,088	10,017	6,428	127	691	321,880
February	133,645	133,812	21,962	22,863	10,292	6,584	125	686	329,969
March	134,290	134,972	22,119	23,164	10,671	6,912	120	695	332,943
April	133,600	131,825	21,798	22,195	10,636	7,053	125	672	327,904
May	133,727	131,194	22,178	22,343	10,520	6,986	131	675	327,754
June	134,112	130,948	22,253	22,435	10,344	6,809	140	678	327,719

FACTORIES: MONTHLY EMPLOYMENT, BY SEX, STATES AND TERRITORIES, 1967–68—*contd*

Month	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
				PERSONS					
July	513,851	433,247	117,365	113,851	61,613	33,981	1,408	3,494	1,278,810
August	514,278	433,644	117,502	114,207	61,879	33,637	1,423	3,515	1,280,085
September	515,917	433,835	117,818	114,938	62,083	33,436	1,408	3,497	1,282,932
October	517,758	434,915	117,656	115,737	62,622	33,380	1,427	3,512	1,287,007
November	519,897	437,331	116,321	116,513	63,227	33,744	1,412	3,565	1,292,010
December	516,151	435,406	109,829	116,601	63,236	34,070	1,385	3,567	1,280,245
January	515,169	437,628	111,118	117,795	63,728	34,531	1,374	3,596	1,284,939
February	519,521	443,277	115,294	119,773	64,575	34,412	1,419	3,598	1,301,869
March	520,948	444,833	116,672	120,624	65,337	34,748	1,449	3,619	1,308,230
April	519,628	439,421	116,972	119,251	65,232	34,793	1,458	3,587	1,300,342
May	520,730	437,574	117,762	119,698	65,254	34,797	1,489	3,567	1,300,871
June	520,799	436,677	118,935	119,844	65,246	34,461	1,505	3,584	1,301,051

Distribution of employees according to age

The following table shows the number of each sex employed in Australia in each age group on the last pay day in June.

FACTORIES: DISTRIBUTION OF EMPLOYEES, BY AGE AND SEX, AUSTRALIA(*a*) JUNE 1964 TO JUNE 1968

EXCLUDING WORKING PROPRIETORS

	Males			*Females*			*Persons*		
June—	*Under 16 years*	*16 and under 21 years*	*21 years and over*	*Under 16 years*	*16 and under 21 years*	*21 years and over*	*Under 16 years*	*16 and under 21 years*	*21 years and over*
1964	8,632	100,164	792,711	7,130	55,533	228,170	15,762	155,697	1,020,881
1965	7,614	104,477	821,711	5,920	57,226	245,437	13,534	161,703	1,067,148
1966	6,690	105,902	827,971	5,364	56,104	251,428	12,054	162,006	1,079,399
1967	5,703	107,285	842,097	5,005	54,727	262,494	10,708	162,012	1,104,591
1968	4,963	105,691	862,678	4,387	52,546	270,786	9,350	158,237	1,133,464

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

Distribution of sexes in factories

Average number of males and females employed

FACTORIES: MALES AND FEMALES EMPLOYED, STATES AND TERRITORIES, 1963-64 to 1967-68

State or Territory	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
			MALES		
New South Wales	366,250	379,672	387,181	390,087	395,838
Victoria	295,440	307,006	310,303	314,017	316,108
Queensland	91,123	95,328	96,150	96,082	98,027
South Australia	90,933	94,690	96,194	96,076	98,929
Western Australia	48,163	50,065	51,464	53,981	56,835
Tasmania	26,221	26,768	28,041	28,364	28,550
Northern Territory	n.a.	1,098	1,182	1,308	1,380
Australian Capital Territory	n.a.	2,634	2,896	2,992	3,007
Australia(*a*)	**918,130**	**957,261**	**973,411**	**982,907**	**998,674**
			FEMALES		
New South Wales	121,503	129,307	132,183	133,967	135,347
Victoria	117,680	125,407	128,846	131,290	133,837
Queensland	19,573	20,918	21,431	21,855	22,825
South Australia	19,880	21,493	22,149	22,144	22,488
Western Australia	7,542	8,032	8,818	9,776	10,500
Tasmania	5,612	5,812	6,274	6,515	6,628
Northern Territory	n.a.	112	112	115	139
Australian Capital Territory	n.a.	593	599	639	709
Australia(*a*)	**291,790**	**311,674**	**320,412**	**326,301**	**332,473**

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

Rate of annual variation for each sex

The percentages of increase or decrease on the average numbers of males and females employed in the preceding year are shown in the following table.

FACTORIES: ANNUAL PERCENTAGE INCREASES OF MALES AND FEMALES EMPLOYED, STATES AND TERRITORIES, 1963-64 TO 1967-68

State or Territory	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
MALES					
New South Wales	2.27	3.66	1.98	0.75	1.47
Victoria	3.41	3.91	1.07	1.20	0.67
Queensland	5.30	4.61	0.86	−0.07	2.02
South Australia	4.94	4.13	1.59	−0.12	2.97
Western Australia	4.13	3.95	2.79	4.89	5.29
Tasmania	3.02	2.09	4.76	1.15	0.66
Northern Territory	n.a.	n.a.	7.65	10.66	5.50
Australian Capital Territory	n.a.	n.a.	9.95	3.31	0.50
Australia(*a*)	3.31	**4.26**	**1.69**	**0.98**	**1.58**
FEMALES					
New South Wales	3.73	6.42	2.22	1.35	1.03
Victoria	4.94	6.57	2.74	1.90	1.94
Queensland	6.02	6.87	2.45	1.98	4.44
South Australia	6.82	8.11	3.05	−0.02	1.55
Western Australia	5.00	6.50	9.79	10.86	7.41
Tasmania	5.85	3.56	7.95	3.84	1.73
Northern Territory	n.a.	n.a.	..	2.68	20.87
Australian Capital Territory	n.a.	n.a.	1.01	6.68	10.95
Australia(*a*)	4.65	**6.81**	**2.80**	**1.84**	**1.86**

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.
Minus sign (−) indicates decrease.

Masculinity of persons employed

The following table shows the proportion of males to females employed in factories in each State and Territory.

FACTORIES: MASCULINITY(*a*) OF PERSONS EMPLOYED STATES AND TERRITORIES, 1963-64 TO 1967-68

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.* (*b*)
1963–64	301	251	466	457	639	467	n.a.	n.a.	315
1964–65	294	245	456	441	623	461	980	444	307
1965–66	293	241	449	434	584	447	1,055	483	304
1966–67	291	239	440	434	552	435	1,137	468	301
1967–68	292	236	429	440	541	431	993	424	300

(*a*) Number of males per 100 females. (*b*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

Employment of females in particular industries

The majority of females in manufacturing industries are employed in four classes, namely: 4, Industrial metals, machines, etc.; 6, Textiles; 8, Clothing; and 9, Food, drink and tobacco. In 1967–68 these industries accounted for 76.75 per cent of all females in factories. In two classes only did the number of females exceed the number of males—in Class 6, Textiles, where there were 137 females to every 100 males, and in Class 8, Clothing, with 300 females to every 100 males. The following table shows the average number of males and females employed in each of the four classes.

MALES AND FEMALES EMPLOYED IN PARTICULAR INDUSTRIES STATES AND TERRITORIES, 1967-68

Class of industry	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Males—									
Industrial metals, etc.	228,877	162,487	43,729	64,263	29,495	11,357	807	1,100	542,115
Textiles and textile goods (not dress)	9,024	17,696	915	1,313	368	1,772	..	..	31,088
Clothing (except knitted)	10,295	12,731	1,970	1,656	767	281	13	56	27,769
Food, drink and tobacco	29,623	28,826	22,507	7,940	6,515	3,651	158	216	99,436
All other classes	118,019	94,368	28,906	23,757	19,690	11,489	402	1,635	298,266
Total males	*395,838*	*316,108*	*98,027*	*98,929*	*56,835*	*28,550*	*1,380*	*3,007*	*998,674*
Females—									
Industrial metals, etc.	39,059	29,586	3,974	8,380	2,199	798	63	106	84,165
Textiles and textile goods (not dress)	11,973	25,381	1,242	1,516	390	2,214	..	..	42,716
Clothing (except knitted)	34,123	36,296	6,519	3,506	2,248	445	9	125	83,271
Food, drink and tobacco	14,734	15,317	5,913	4,324	2,825	1,762	35	95	45,005
All other classes	35,458	27,257	5,177	4,762	2,838	1,409	32	383	77,316
Total females	*135,347*	*133,837*	*22,825*	*22,488*	*10,500*	*6,628*	*139*	*709*	*332,473*

Children employed in factories

Number of children employed

In the returns for the various States and Territories the term 'child' denotes any person under sixteen years of age. The following table shows the number of children of each sex employed in manufacturing industries in June of each year from 1966 to 1968.

FACTORIES: CHILDREN(*a*) EMPLOYED STATES AND TERRITORIES, JUNE 1966 TO JUNE 1968

State or Territory	*June 1966*			*June 1967*			*June 1968*		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
New South Wales	2,212	1,748	3,960	1,921	1,642	3,563	1,554	1,603	3,157
Victoria	1,525	1,488	3,013	1,333	1,392	2,725	1,150	1,097	2,247
Queensland	1,369	1,132	2,501	1,106	1,074	2,180	1,033	877	1,910
South Australia	471	471	942	386	433	819	344	376	720
Western Australia	944	430	1,374	792	307	1,099	767	331	1,098
Tasmania	126	87	213	141	131	272	98	96	194
Northern Territory	3	..	3	4	..	4	8	2	10
Australian Capital Territory	40	8	48	20	26	46	9	5	14
Australia	**6,690**	**5,364**	**12,054**	**5,703**	**5,005**	**10,708**	**4,963**	**4,387**	**9,350**

(*a*) Under sixteen years of age.

Industries employing children

The distribution of children employed in factories and the proportion of children employed to total employees, by the main classes of industry employing persons under sixteen years of age, are shown in the following table.

FACTORIES: CHILDREN(*a*) EMPLOYED, BY SEX, AND CLASS OF INDUSTRY AUSTRALIA, JUNE 1968

Class of industry	*Children employed(a)*		*Total employed(b)*		*Proportion (per cent) of children employed to total employees(b)*	
	Males	*Females*	*Males*	*Females*	*Males*	*Females*
Industrial metals, machines, conveyances	2,502	415	525,661	82,485	0.48	0.50
Textiles and textile goods (not dress)	179	605	30,702	42,513	0.58	1.42
Clothing (except knitted)	238	2,211	23,772	81,587	1.00	2.71
Food, drink and tobacco	538	437	95,651	43,588	0.56	1.00
Sawmills, joinery, boxes, etc	432	71	52,832	4,411	0.82	1.61
Furniture of wood, bedding, etc.	249	64	17,444	5,908	1.43	1.08
Paper, stationery, printing, bookbinding etc.	387	338	64,569	24,415	0.60	1.38
All other industries	438	246	155,137	41,261	0.28	0.60
Total, all classes	**4,963**	**4,387**	**965,768**	**326,168**	**0.51**	**1.35**

(*a*) Under sixteen years of age. (*b*) Excludes working proprietors.

Apprenticeship

Acts are in force in all States for the regulation of the age at which children may be employed in gainful occupations. Legislative provision is also made for the regulation of apprenticeship under various State Factories Acts or Arbitration Acts. These Acts, while laying down general principles, leave to the wages tribunals the actual determination of the conditions under which apprentices may be employed.

Power equipment in factories

Since 1936–37 statistics of power equipment in factories relate to the 'rated horsepower' of engines ordinarily in use and engines in reserve or idle, omitting obsolete engines. In addition, particulars of the power equipment of central electric stations are collected in greater detail. To avoid duplication it is essential that some distinction should be made between central electric stations and other classes of industries. In the following tables central electric stations have been treated separately from other factories.

Rated horsepower of engines in factories other than central electric stations

FACTORIES(*a*): TOTAL RATED HORSEPOWER OF ENGINES AND ELECTRIC MOTORS, STATES AND TERRITORIES, 1967-68

State or Territory	Factories(a)	*Rated horsepower of engines and motors*	
		Ordinarily in use(b)	*In reserve or idle (omitting obsolete)*
New South Wales	24,834	3,495,027	467,399
Victoria	18,014	2,150,763	298,556
Queensland	6,111	930,126	139,897
South Australia	6,227	800,952	66,801
Western Australia	5,315	485,644	89,879
Tasmania	1,776	373,840	56,605
Northern Territory	183	7,017	690
Australian Capital Territory	242	14,181	1,444
Australia	**62,702**	**8,257,550**	**1,121,271**

(*a*) Excludes electric light and power works, details of which are shown on pages 1057–8.
(*b*) Excludes motors driven by electricity of own generation.

Rated horsepower of engines and electric motors ordinarily in use, by type

FACTORIES(*a*): TOTAL RATED HORSEPOWER OF ENGINES AND ELECTRIC MOTORS ORDINARILY IN USE, BY TYPE, STATES AND TERRITORIES, 1967-68

State or Territory	*Steam*		*Internal combustion (all types)*	*Water*	*Motors driven by electricity*		*Total(b)*
	Reciprocating	*Turbine*			*Purchased*	*Own generation*	
New South Wales	47,919	266,992	66,519	85	3,113,512	140,908	3,495,027
Victoria . .	15,051	115,678	54,044	830	1,965,160	111,085	2,150,763
Queensland . .	51,408	227,731	29,418	..	621,569	193,042	930,126
South Australia .	3,011	57,952	10,886	..	729,103	28,739	800,952
Western Australia .	7,681	19,728	31,095	..	427,140	12,428	485,644
Tasmania . .	775	..	19,091	..	353,974	3,206	373,840
Northern Territory	..	..	182	..	6,835	140	7,017
Australian Capital Territory . .	1	35	289	..	13,856	..	14,181
Australia .	**125,846**	**688,116**	**211,524**	**915**	**7,231,149**	**489,548**	**8,257,550**

(*a*) Excludes electric light and power works, details of which are shown on pages 1057–8. (*b*) Excludes motors driven by electricity of own generation.

FACTORIES(*a*): TOTAL RATED HORSEPOWER OF ENGINES AND ELECTRIC MOTORS ORDINARILY IN USE, BY TYPE, AUSTRALIA(*b*), 1963-64 TO 1967-68

Year	*Steam*		*Internal combustion (all types)*	*Water*	*Motors driven by electricity*		*Total(c)*
	Reciprocating	*Turbine*			*Purchased*	*Own generation*	
1963–64 . .	154,628	439,121	198,597	840	5,733,810	335,580	6,526,996
1964–65 . .	147,417	477,268	194,458	891	6,089,766	362,719	6,909,800
1965–66 . .	127,775	615,622	201,195	901	6,450,895	419,990	7,396,388
1966–67 . .	127,313	644,384	207,542	957	6,834,661	454,058	7,814,857
1967–68 . .	125,846	688,116	211,524	915	7,231,149	489,548	8,257,550

(*a*) Excludes electric light and power works, details of which are shown on pages 1057–8. (*b*) Prior to 1 July 1964 excludes Northern Territory and Australian Capital Territory. (*c*) Excludes motors driven by electricity of own generation.

Rated horsepower of engines and electric motors ordinarily in use, by class of industry

FACTORIES(*a*): TOTAL RATED HORSEPOWER OF ENGINES AND ELECTRIC MOTORS ORDINARILY IN USE(*b*), BY CLASS OF INDUSTRY, STATES AND TERRITORIES, 1967-68

Class of industry(*c*)	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1. Treatment non-metal. mine, etc. products	136,839	115,059	45,205	51,569	29,005	24,980	486	948	404,091
2. Bricks, etc.	86,688	60,043	14,623	17,859	20,686	3,838	(*d*)	(*d*)	205,556
3. Chemicals, etc.	422,978	265,433	65,518	48,754	70,176	22,964	(*d*)	(*d*)	896,861
4. Industrial metals, machines, etc.	1,927,916	757,653	207,299	440,549	181,626	91,971	2,219	1,466	3,610,699
5. Jewellery, etc.	4,394	4,104	699	1,275	699	134	..	4,516	15,821
6. Textiles, etc.	73,486	126,108	11,243	9,593	3,897	11,888	..	..	236,215
7. Skins, leather, etc.	19,250	19,817	6,562	6,218	3,679	485	..	..	56,011
8. Clothing, etc.	30,479	34,967	6,080	5,529	2,883	928	45	246	81,157
9. Food, drink, etc.	276,683	275,885	386,440	77,612	63,433	37,670	2,359	1,052	1,121,134
10. Sawmills, etc.	201,766	140,019	123,405	60,940	73,394	58,645	689	2,180	661,038
11. Furniture, etc.	25,515	17,072	10,257	7,702	5,341	1,966	(*d*)	(*d*)	67,953
12. Paper, stationery, etc.	131,797	148,221	32,798	39,994	20,885	117,236	81	1,651	492,663
13. Rubber	75,839	100,030	13,343	18,694	5,241	573	130	173	214,023
14. Musical instruments	1,761	297	50	11	11	..	..	..	2,130
15. Miscellaneous	57,072	58,324	4,171	6,667	3,292	436	..	..	129,962
Total, classes 1 to 15	*3,472,463*	*2,123,032*	*927,693*	*792,966*	*484,248*	*373,714*	*7,017*	*14,181*	*8,195,314*
16. Gas works	22,564	27,731	2,433	7,986	1,396	126	..	..	62,236
Total, all classes	**3,495,027**	**2,150,763**	**930,126**	**800,952**	**485,644**	**373,840**	**7,017**	**14,181**	**8,257,550**

(*a*) Excludes electric light and power works, details of which are shown below. (*b*) Excludes motors driven by electricity of own generation. (*c*) For full titles *see* table on page 1060. (*d*) Not available for publication.

Capacity of engines and generators installed in central electric stations, by type

CENTRAL ELECTRIC STATIONS: POWER EQUIPMENT, BY TYPE, AUSTRALIA, 1967-68

		Capacity of engines and generators				
		Steam		*Internal combustion*		
Equipment		*Reciprocating*	*Turbine*	*(all types)*	*Water*	*Total*
Engines installed—						
Total installed	rated hp	800	11,507,615	538,886	4,346,285	16,393,586
Generators installed—						
Kilowatt capacity—						
Total installed	kW	560	8,646,742	370,118	3,135,500	12,152,920
Effective capacity	,,	500	8,567,277	349,408	3,111,185	12,028,370
Horsepower equivalent—						
Total installed	hp	751	11,590,785	496,136	4,203,074	16,290,746
Effective capacity	,,	670	11,484,263	468,374	4,170,482	16,123,789

CENTRAL ELECTRIC STATIONS: NUMBER AND POWER EQUIPMENT
STATES AND TERRITORIES, 1967-68

Equipment		*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aus*
Central electric stations	No.	50	16	43	28	89	21	5	..	25
Engines installed	rated hp	7,524,053	3,543,153	1,904 145	1,085,294	919,502	1,367,439	50,000	..	16,393,58
Generators installed—										
Kilowatt capacity—										
Total installed	kW	5,600,394	2,643,560	1,407,245	810,520	674,517	958,490	58,194	..	12,152,92
Effective capacity	,,	5,565,639	2,631,545	1,334,850	814,094	667,645	955,321	59,276	..	12,028,37
Horsepower equivalent—										
Total installed	hp	7,507,216	3,543,639	1,886,385	1,086,486	904,177	1,284,837	78,008	..	16,290,74
Effective capacity	,,	7,460,628	3,527,533	1,789,340	1,091,277	894,965	1,280,589	79,458	..	16,123,78

Salaries and wages paid, value of materials used, output, and production

In all tables relating to salaries and wages paid in factories the amounts drawn by working proprietors are excluded.

The gross value of factory output for 1967–68 was $17,094 million, of which $9,104 million (53.3 per cent) was the value of the materials used, including containers, etc., tools replaced, and repairs to plant and buildings, and $559 million the value of the power, fuel, light, water, and lubricating oil used. The difference between the sum of the last two amounts and the gross value of output, namely, $7,431 million, represents the net value of factory production, defined as 'the value of consumable commodities produced during the year, deducting, so far as possible, the value of goods consumed in process of production'. Depreciation, however, is not deducted (*see* page 1063). The gross value of factory output and the value of materials used each contain inherent elements of duplication, as the output of some factories becomes the materials used in other factories.

Salaries and wages paid

By class of industry

FACTORIES: SALARIES AND WAGES PAID, BY CLASS OF INDUSTRY
STATES AND TERRITORIES, 1967-68
($'000)

Class of industry(a)	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1. Treatment non-metal. mine, etc. products	34,510	23,989	9,560	6,654	6,202	2,727	424	873	84,938
2. Bricks, etc.	40,807	23,275	5,878	5,818	5,334	1,044	(*b*)	(*b*)	82,699
3. Chemicals, etc..	88,894	59,759	7,551	10,039	10,524	3,269	(*b*)	(*b*)	180,180
4. Industrial metals, machines, etc.	801,962	570,717	124,210	209,538	85,426	35,538	2,919	3,515	1,833,825
5. Jewellery, etc.	5,148	5,493	726	1,049	529	88	..	924	13,956
6. Textiles, etc.	49,189	99,945	4,305	6,444	1,560	8,859	..	..	170,302
7. Skins, leather, etc.	12,030	9,071	2,617	2,675	1,296	121	..	..	27,810
8. Clothing, etc.	82,053	96,531	12,980	8,564	4,340	1,222	47	348	206,086
9. Food, drink, etc.	117,308	118,363	76,920	29,242	22,575	13,591	592	814	379,405
10. Sawmills, etc.	50,812	40,307	20,130	12,794	15,402	9,655	250	781	150,131
11. Furniture, etc.	24,338	16,809	6,891	4,563	3,886	1,329	(*b*)	(*b*)	57,964
12. Paper, stationery, etc.	107,501	92,314	20,102	15,440	10,044	16,543	185	3,292	265,422
13. Rubber	24,068	26,085	4,992	5,590	1,352	355	48	112	62,601
14. Musical instruments	1,388	581	36	36	55	..	..	..	2,097
15. Miscellaneous	41,256	43,390	2,870	5,267	2,042	304	..	..	95,130
Total, classes 1 to 15	*1,481,266*	*1,226,628*	*299,768*	*323,713*	*170,567*	*94,646*	*4,673*	*11,285*	*3,612,546*
16. Heat, light and power	16,801	17,588	6,187	6,347	4,534	1,590	310	..	53,357
Total, all classes	1,498,067	1,244,216	305,955	330,060	175,100	96,236	4,983	11,285	3,665,902

(*a*) For full titles *see* table on page 1060. (*b*) Not available for publication.

Totals and averages. The following table shows the total amount of salaries and wages paid, and the average amount paid, according to sex, per employee in each State and Territory. The figures exclude working proprietors and the amounts drawn by them.

In comparing the figures in the following table regard should be paid to the nature of certain industries which are carried on to a greater extent in some States than in others. In Victoria, for instance, there are a large number of employees in Class 8, Clothing, comprising a relatively high percentage of women and children.

FACTORIES: TOTAL AND AVERAGE SALARIES AND WAGES PAID STATES AND TERRITORIES, 1963-64 TO 1967-68

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.(a)*
MALES									
Total amount paid ($'000)—									
1963–64 . .	927,806	747,177	196,484	215,127	99,978	63,007	n.a.	n.a.	2,249,580
1964–65 . .	1,034,044	840,704	226,329	245,565	110,368	68,183	3,298	7,854	2,536,347
1965–66 . .	1,092,517	877,256	239,885	252,260	123,022	73,932	3,666	8,819	2,671,358
1966–67 . .	1,174,476	949,745	251,545	266,640	140,114	80,685	4,146	9,306	2,876,656
1967–68 . .	1,258,255	1,011,261	272,301	295,065	159,487	85,329	4,721	9,968	3,096,386
Average per male employee ($)—									
1963–64 . .	2,618	2,621	2,254	2,457	2,201	2,491	n.a.	n.a.	2,542
1964–65 . .	2,812	2,833	2,476	2,689	2,337	2,644	3,242	3,091	2,746
1965–66 . .	2,913	2,921	2,600	2,720	2,538	2,730	3,333	3,172	2,843
1966–67 . .	3,105	3,120	2,725	2,880	2,755	2,939	3,354	3,238	3,028
1967–68 . .	3,277	3,299	2,888	3,092	2,974	3,085	3,623	3,462	3,206
FEMALES									
Total amount paid ($'000)—									
1963–64 . .	173,214	165,247	22,278	25,188	8,537	7,575	n.a.	n.a.	402,040
1964–65 . .	195,912	187,788	26,029	28,659	9,609	8,332	185	848	457,362
1965–66 . .	211,163	199,977	28,160	30,691	11,149	9,030	192	1,047	491,411
1966–67 . .	225,270	217,693	30,664	32,466	13,483	10,071	203	1,177	531,027
1967–68 . .	239,812	232,956	33,654	34,995	15,613	10,908	263	1,317	569,516
Average per female employee ($)—									
1963–64 . .	1,448	1,432	1,182	1,312	1,163	1,367	n.a.	n.a.	1,406
1964–65 . .	1,537	1,526	1,290	1,372	1,228	1,454	1,799	1,469	1,496
1965–66 . .	1,623	1,584	1,369	1,420	1,295	1,457	1,904	1,806	1,565
1966–67 . .	1,708	1,691	1,462	1,502	1,411	1,567	1,972	1,904	1,660
1967–68 . .	1,798	1,773	1,538	1,592	1,522	1,668	2,051	1,933	1,746
PERSONS									
Total amount paid $'000)—									
1963–64 . .	1,101,021	912,424	218,762	240,315	108,515	70,582	n.a.	n.a.	2,651,620
1964–65 . .	1,229,957	1,028,492	252,358	274,225	119,978	76,515	3,483	8,702	2,993,709
1965–66 . .	1,303,680	1,077,234	268,046	282,951	134,171	82,963	3,859	9,866	3,162,769
1966–67 . .	1,399,746	1,167,437	282,209	299,105	153,597	90,756	4,349	10,483	3,407,683
1967–68 . .	1,498,067	1,244,216	305,955	330,060	175,100	96,236	4,983	11,285	3,665,902
Average per employee ($)—									
1963–64 . .	2,323	2,278	2,064	2.251	2,057	2,290	n.a.	n.a.	2,265
1964–65 . .	2,484	2,450	2,262	2,444	2,180	2,427	3,110	2,791	2,435
1965–66 . .	2,581	2,525	2,376	2,474	2,351	2,493	3,213	2,936	2,523
1966–67 . .	2,744	2,696	2,491	2,619	2,543	2,678	3,248	3,002	2,684
1967–68 . .	2,896	2,841	2,634	2,811	2,741	2,814	3,482	3,170	2,838

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

The following table shows, by class of industry, the amounts paid to managerial and clerical staff, including salaried managers and working directors, chemists, draughtsmen and other laboratory and research staff, and those paid to other employees. Amounts drawn by working proprietors are excluded in all cases.

FACTORIES: SALARIES AND WAGES PAID TO MANAGERS, CLERICAL STAFF, ETC. AND OTHER EMPLOYEES, BY CLASS OF INDUSTRY, AUSTRALIA, 1967-68

Class of industry	*Managers, clerical staff, chemists, draughtsmen, etc.*		*All other employees*	
	Males	*Females*	*Males*	*Females*
	$'000	$'000	$'000	$'000
1. Treatment of non-metalliferous mine and quarry products	14,226	2,394	67,937	381
2. Bricks, pottery, glass, etc.	10,203	2,165	67,141	3,190
3. Chemicals, dyes, explosives, paints, oils, grease .	48,357	10,655	108,349	12,819
4. Industrial metals, machines, conveyances . .	327,091	63,546	1,355,680	87,507
5. Precious metals, jewellery, plate	2,076	640	9,876	1,364
6. Textiles and textile goods (not dress) . . .	19,465	7,602	76,938	66,297
7. Skins and leather (not clothing or footwear) .	3,383	911	17,711	5,806
8. Clothing (except knitted)	17,597	9,290	52,285	126,914
9. Food, drink and tobacco	59,682	18,718	243,914	57,092
10. Sawmills, joinery, boxes, etc., wood turning and carving	19,062	4,241	124,002	2,826
11. Furniture of wood, bedding, etc. . . .	7,157	2,743	41,075	6,989
12. Paper, stationery, printing, bookbinding, etc. .	41,502	12,664	181,969	29,287
13. Rubber	10,878	2,396	43,473	5,853
14. Musical instruments	256	103	1,404	335
15. Miscellaneous products	17,982	5,817	52,692	18,638
Total, classes 1 to 15	*598,918*	*143,883*	*2,444,446*	*425,299*
16. Heat, light and power	6,044	275	46,978	59
Total, all classes	**604,963**	**144,158**	**2,491,423**	**425,358**
	$	$	$	$
Average paid per employee	4,314	1,938	3,018	1,690

Power, fuel and light used

Value by class of industry

FACTORIES: VALUE OF POWER, FUEL AND LIGHT USED(*a*), BY CLASS OF INDUSTRY STATES AND TERRITORIES, 1967-68

($'000)

Class of industry(*b*)	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1. Treatment non-metalliferous mine, etc. products . .	12,714	6,628	3,021	2,272	1,883	1,131	27	53	27,728
2. Bricks, etc. . .	10,416	6,622	1,811	1,749	2,034	435	(c)	(c)	23,268
3. Chemicals, etc. .	28,234	21,313	3,512	4,779	5,360	1,083	(c)	(c)	64,375
4. Industrial metals, etc.	125,799	34,950	11,244	27,512	7,153	9,304	74	61	216,098
5. Jewellery, etc. . .	397	467	51	116	80	6	. .	186	1,304
6. Textiles, etc. . .	4,039	7,268	278	532	161	659	. .	. .	12,938
7. Skins, leather, etc. .	843	942	218	278	152	12	. .	. .	2,444
8. Clothing, etc. . .	2,223	2,578	429	342	198	85	5	26	5,886
9. Food, drink, etc. .	15,722	16,624	8,962	3,392	3,162	1,747	146	78	49,834
10. Sawmills, etc. . .	3,389	2,280	1,428	960	947	954	8	17	9,984
11. Furniture, etc. .	593	421	136	120	84	34	(c)	(c)	1,391
12. Paper, stationery, etc.	5,463	8,174	1,341	2,039	701	3,699	14	171	21,602
13. Rubber . . .	2,491	3,370	512	588	147	42	8	17	7,173
14. Musical instruments	85	27	2	1	1	. .	. .	. .	115
15. Miscellaneous .	2,572	4,142	144	287	116	12	. .	. .	7,272
Total, classes 1 to 15	*214,979*	*115,808*	*33,086*	*44,967*	*22,180*	*19,206*	*359*	*830*	*451,414*
16. Heat, light and power	37,661	27,278	18,785	11,238	11,381	279	798	. .	107,421
Total, all classes .	252,639	143,086	51,871	56,205	33,561	19,485	1,157	830	558,834

(*a*) Includes value of lubricants and water. (*b*) For full titles *see* table above. (c) Not available for publication.

Total value

FACTORIES: VALUE OF POWER, FUEL AND LIGHT USED(*a*), STATES AND TERRITORIES 1963-64 TO 1967-68

($'000)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*(*b*)
1963–64 . .	210,157	114,648	37,462	34,772	23,749	16,364	n.a.	n.a.	437,153
1964–65 . .	217,548	125,161	38,749	39,295	26,045	18,327	865	644	466,633
1965–66 . .	223,517	127,858	43,791	44,066	27,314	19,181	856	760	487,343
1966–67 . .	238,113	134,399	46,949	51,302	30,031	19,826	946	735	522,300
1967–68 . .	252,639	143,086	51,871	56,205	33,561	19,485	1,157	830	558,834

(*a*) Includes value of lubricants and water. (*b*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

Value of items

FACTORIES: VALUE OF ITEMS OF POWER, FUEL AND LIGHT USED(*a*) STATES AND TERRITORIES, 1967-68

($'000)

Item of power, fuel, etc.	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Coal, black . .	39,219	2,444	21,977	(*b*)7,416	5,540	564	..	94	77,254
,, brown . .	2	19,760	..	(*c*)	..	..	..	..	19,763
Brown coal briquettes	10	9,937	..	(*c*)	..	(*c*)	..	(*c*)	9,947
Coke . . .	47,620	1,106	1,159	12,684	632	686	..	..	63,887
Wood . . .	675	542	379	460	582	85	2	(*c*)	2,726
Fuel oil . . .	32,160	27,480	8,823	13,512	13,035	5,191	838	179	101,219
Tar (fuel) . .	2,653	163	14	117	47	14	29	2	3,038
Electricity . .	77,657	63,558	14,549	16,014	8,935	11,366	219	486	192,784
Gas . . .	23,545	4,710	527	2,105	267	92	(*c*)	(*c*)	31,247
Other (charcoal, etc.)	13,912	3,122	767	1,083	2,554	653	3	7	22,101
Water . . .	10,928	7,249	2,458	1,806	1,219	546	32	35	24,273
Lubricating oils .	4,259	3,014	1,217	1,009	749	287	35	26	10,595
Total . .	**252,639**	**143,086**	**51,871**	**56,205**	**33,561**	**19,485**	**1,157**	**830**	**558,834**

(*a*) Includes value of lubricants and water. (*b*) Includes $5,815,603 the value of 2,078,280 tons of sub-bituminous Leigh Creek coal. (*c*) Less than $500.

Quantities of fuel used

FACTORIES: QUANTITIES OF FUEL USED, STATES AND TERRITORIES, 1967-68

Fuel		*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Coal, black .	'000 tons	8,118	241	2,802	(*a*)2,235	912	56	..	6	14,370
,, brown .	,,	1	18,190	..	(*b*)	..	..	..	..	18,191
Brown coal briquettes .	,,	1	855	..	(*b*)	..	(*b*)	..	(*b*)	856
Coke . .	,,	2,821	45	32	598	23	19	..	..	3,537
Wood . .	,,	138	133	94	235	158	35	(*b*)	(*b*)	792
Fuel oil . .	'000 gal	459,771	375,696	119,532	190,774	189,613	67,314	8,483	1 306	1,412,489
Tar (fuel) .	'000 tons	164	8	1	10	3	1	3	(*b*)	190

(*a*) Includes 2,078,280 tons of Leigh Creek coal. (*b*) Less than 500 tons.

Value of materials used

By class of industry. The value of materials used includes the value of containers, packing, etc., the cost of tools replaced, and repairs to plant.

FACTORIES: VALUE OF MATERIALS USED, BY CLASS OF INDUSTRY STATES AND TERRITORIES, 1967-68

($'000)

Class of industry(a)	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1. Treatment non-metal. mine, etc. products	136,295	63,703	22,813	17,981	18,342	5,978	1,549	3,586	270,249
2. Bricks, etc.	40,768	25,138	5,334	5,956	3,849	700	(*b*)	(*b*)	82,482
3. Chemicals, etc.	445,473	320,707	75,981	63,339	98,854	9,342	(*b*)	(*b*)	1,014,123
4. Industrial metals, etc.	1,758,591	946,395	319,829	450,916	158,212	71,091	3,313	4,234	3,712,583
5. Jewellery, etc.	6,681	5,815	729	877	392	72	..	1,463	16,030
6. Textiles, etc.	119,996	238,882	9,254	11,949	4,959	19,200	..	..	404,240
7. Skins, leather, etc.	30,343	19,170	5,081	10,006	1,653	686	..	..	66,939
8. Clothing, etc.	138,787	139,926	14,511	10,127	4,467	1,048	29	219	309,113
9. Food, drink, etc.	531,204	596,795	503,808	131,253	111,632	61,749	1,411	2,559	1,940,410
10. Sawmills, etc.	116,588	80,082	38,989	26,809	29,298	23,978	423	1,321	317,488
11. Furniture, etc.	48,123	34,615	14,646	9,212	8,903	2,702	(*b*)	(*b*)	118,581
12. Paper, stationery, etc.	200,791	186,814	35,322	26,666	15,775	28,862	99	1,695	496,025
13. Rubber	49,466	54,136	10,725	9,197	3,254	732	97	420	128,027
14. Musical instruments	2,855	694	36	15	14	..	..	..	3,614
15. Miscellaneous	69,753	87,290	5,410	10,218	3,423	195	..	..	176,289
Total, classes 1 to 15	*3,695,714*	*2,800,162*	*1,062,468*	*784,522*	*463,028*	*226,337*	*7,581*	*16,382*	*9,056,193*
16. Heat, light and power	17,181	13,262	10,076	3,496	2,526	1,236	414	..	48,190
Total, all classes	**3,712,895**	**2,813,424**	**1,072,543**	**788,018**	**465,554**	**227,573**	**7,995**	**16,382**	**9,104,383**

(*a*) For full titles *see* table on page 1060. (*b*) Not available for publication.

Total amount

FACTORIES: VALUE OF MATERIALS USED, STATES AND TERRITORIES 1963-64 TO 1967-68

($'000)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.(a)*
1963–64	2,859,622	2,190,398	812,924	599,658	300,798	172,130	n.a.	n.a.	6,935,530
1964–65	3,212,677	2,425,961	824,681	668,946	329,740	195,972	4,550	11,440	7,673,967
1965–66	3,266,547	2,469,372	924,427	698,996	362,634	209,794	5,497	13,349	7,950,615
1966–67	3,466,134	2,671,315	982,896	728,094	399,406	223,566	7,214	14,918	8,493,544
1967–68	3,712,895	2,813,424	1,072,543	788,018	465,554	227,573	7,995	16,382	9,104,383

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

Value of output

By class of industry. The value of the output of factories in the various classes in each State and Territory in 1967–68 is shown in the following table. It represents the selling value at the factory (excluding delivery costs and charges) of goods made or processed during the year, including by-products. In addition, it includes the amount received for other work done, such as repair work, assembling and making up for customers. The difference between the sum of the values of the materials and of the power, fuel and light used, and the value of output, is the net value of factory production (*see* page 1063).

FACTORIES: VALUE OF OUTPUT, BY CLASS OF INDUSTRY STATES AND TERRITORIES, 1967-68

($'000)

Class of industry(a)	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1. Treatment non-metal. mine, etc. products .	226,700	124,125	48,919	39,197	39,125	15,221	2,824	5,553	501,664
2. Bricks, etc. . .	130,585	78,438	18,990	19,154	17,168	3,134	(*b*)	(*b*)	269,138
3. Chemicals, etc.. .	812,247	550,678	123,581	106,828	151,640	19,614	(*b*)	(*b*)	1,765,495
4. Industrial metals, etc.	3,297,441	1,903,178	562,325	838,189	324,668	148,969	7,879	9,663	7,092,313
5. Jewellery, etc. . .	16,948	16,362	1,930	3,084	1,680	233	..	3,451	43,688
6. Textiles, etc. . .	223,550	426,636	17,722	23,392	8,134	32,762	..	..	732,196
7. Skins, leather, etc. .	52,394	35,767	9,841	14,506	4,036	871	..	..	117,414
8. Clothing, etc. . .	293,983	300,436	38,376	25,629	12,187	3,465	91	909	675,075
9. Food, drink, etc. .	864,475	907,400	688,461	203,335	168,359	88,500	2,877	4,321	2,927,728
10. Sawmills, etc. . .	214,317	149,536	77,926	50,895	60,248	42,894	783	2,593	599,192
11. Furniture, etc. . .	93,467	65,287	26,668	17,790	16,638	5,044	(*b*)	(*b*)	225,584
12. Paper, stationery, etc.	440,823	381,686	73,546	61,523	36,186	65,207	386	7,243	1,066,600
13. Rubber . . .	89,951	108,131	21,716	19,765	6,267	1,571	249	795	248,446
14. Musical instruments .	9,927	1,562	103	78	98	..	..	..	11,768
15. Miscellaneous . .	149,658	171,665	12,146	21,839	7,811	653	..	..	363,772
Total, classes 1 to 15	*6,916,466*	*5,220,888*	*1,722,249*	*1,445,204*	*854,246*	*428,138*	*16,300*	*36,583*	*16,640,075*
16. Heat, light and power	180,050	130,422	60,018	30,909	33,126	16,938	2,531	..	453,995
Total, all classes .	**7,096,517**	**5,351,311**	**1,782,267**	**1,476,113**	**887,372**	**445,076**	**18,831**	**36,583**	**17,094,070**

(*a*) For full titles *see* table on page 1060. (*b*) Not available for publication.

Total value

FACTORIES: VALUE OF OUTPUT, STATES AND TERRITORIES, 1963-64 TO 1967-68

($'000)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.(a)*
1963–64 . .	5,337,695	4,054,822	1,292,260	1,061,786	555,058	341,065	n.a.	n.a.	12,642,686
1964–65 . .	5,951,702	4,500,786	1,341,853	1,206,830	616,422	381,549	12,068	26,145	14,037,355
1965–66 . .	6,154,835	4,624,915	1,511,214	1,270,539	678,751	404,581	13,456	31,528	14,689,819
1966–67 . .	6,632,474	5,041,051	1,622,451	1,343,160	765,224	437,964	16,007	34,514	15,892,845
1967–68 . .	7,096,517	5,351,311	1,782,267	1,476,113	887,372	445,076	18,831	36,583	17,094,070

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

Value of production

By class of industry. The value of production for any industry was defined at the Conference of Statisticians at Sydney in 1925 as 'the value of consumable commodities produced during the year, deducting, so far as possible, the value of goods consumed in process of production'.

In accordance with this definition, it was agreed that a deduction consisting of the costs of raw material, containers, power, fuel, light, lubricants, water, tools replaced, repairs to plant and depreciation should be made from the 'value of output'. Because of the difficulty experienced in securing accurate figures for depreciation, however, it was subsequently decided that no deduction should be made on this account. All the deductions mentioned above, with the exception of depreciation, are included in the items 'value of materials used' and 'value of fuel used' as defined above. The net value of production as given in the following tables is obtained, therefore, by deducting only 'value of materials used' and 'value of fuel used' from the 'value of output'. The value of factory production therefore, approximates 'net value added' in the manufacturing process.

Only certain selected items of costs are recorded in the annual census of production. It must not, therefore, be inferred that when wages and salaries are deducted from the value of production the whole of the 'surplus' is available for interest and profit, as many miscellaneous expenses such as taxation, insurance, advertising, and other overhead charges, as well as depreciation, also have to be taken into account.

The following table shows the value of production in each State and Territory for the various classes of industry.

FACTORIES: VALUE OF PRODUCTION, BY CLASS OF INDUSTRY STATES AND TERRITORIES, 1967-68

($'000)

Class of industry(a)	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1. Treatment non-metal. mine, etc. products .	77,691	53,794	23,085	18,944	18,900	8,112	1,248	1,914	203,687
2. Bricks, etc. . .	79,400	46,678	11,845	11,449	11,284	1,999	(*b*)	(*b*)	163,388
3. Chemicals, etc. .	338,540	208,658	44,089	38,710	47,426	9,189	(*b*)	(*b*)	686,997
4. Industrial metals, etc.	1,413,051	921,834	231,252	359,761	159,303	68,573	4,491	5,367	3,163,632
5. Jewellery, etc. . .	9,870	10,080	1,149	2,091	1,207	155	..	1,801	26,355
6. Textiles, etc. . .	99,514	180,486	8,190	10,911	3,015	12,902	..	..	315,017
7. Skins, leather, etc. .	21,208	15,655	4,542	4,222	2,230	173	..	..	48,031
8. Clothing, etc. . .	152,973	157,932	23,436	15,160	7,523	2,332	57	664	360,076
9. Food, drink, etc. .	317,550	293,980	175,692	68,689	53,565	25,004	1,321	1,684	937,484
10. Sawmills, etc. . .	94,340	67,173	37,509	23,126	30,003	17,962	352	1,254	271,719
11. Furniture, etc.. .	44,752	30,250	11,886	8,458	7,651	2,307	(*b*)	(*b*)	105,612
12. Paper, stationery, etc.	234,570	186,700	36,884	32,818	19,709	32,646	273	5,376	548,973
13. Rubber . . .	37,994	50,626	10,480	9,980	2,866	797	144	359	113,245
14. Musical instruments.	6,988	841	66	62	83	..	..	..	8,040
15. Miscellaneous . .	77,334	80,234	6,592	11,333	4,273	445	..	..	180,211
Total, classes 1 to 15	*3,005,773*	*2,304,919*	*626,696*	*615,715*	*369,037*	*182,596*	*8,360*	*19,372*	*7,132,468*
16. Heat, light and power	125,209	89,882	31,157	16,174	19,220	15,423	1,320	..	298,384
Total, all classes .	**3,130,982**	**2,394,801**	**657,853**	**631,890**	**388,257**	**198,019**	**9,680**	**19,372**	**7,430,853**

(*a*) For full titles *see* table on page 1060. (*b*) Not available for publication.

Total and average values. The value of production and the amount per person employed and per head of population are shown in the following table.

FACTORIES: VALUE OF PRODUCTION—TOTALS AND AVERAGES STATES AND TERRITORIES, 1963-64 TO 1967-68

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.(a)*
Total value ($'000)—									
1963–64 . .	2,267,917	1,749,776	441,873	427,356	230,511	152,571	n.a.	n.a.	5,270,003
1964–65 . .	2,521,476	1,949,665	478,423	498,588	260,637	167,251	6,654	14,060	5,896,754
1965–66 . .	2,664,771	2,027.685	542,996	527,477	288,803	175,606	7,103	17,418	6,251,861
1966–67 . .	2,928,227	2,235,337	592,607	563,764	335,788	194,571	7,847	18,860	6,877,001
1967–68 . .	3,130,982	2,394,801	657,853	631,890	388,257	198,019	9,680	19,372	7,430,853
Average per person employed ($)—									
1963–64 . .	4,650	4,236	3,992	3,857	4,138	4,793	n.a.	n.a.	4,356
1964–65 . .	4,954	4,509	4,116	4,291	4,486	5,134	5,499	4,357	4,647
1965–66 . .	5,131	4,617	4,618	4,457	4,791	5,117	5,489	4,984	4,832
1966–67 . .	5,588	5,020	5,025	4,769	5,267	5,578	5,514	5,194	5,260
1967–68 . .	5,894	5,322	5,443	5,204	5,766	5,629	6,373	5,213	5,582
Average per head of population ($)—									
1963–64 . .	556	569	277	418	289	421	n.a.	n.a.	482
1964–65 . .	609	622	294	474	319	457	126	167	523
1965–66 . .	633	635	327	488	345	475	128	188	544
1966–67 . .	685	688	351	511	389	520	135	189	588
1967–68 . .	720	725	383	565	435	522	159	179	623

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

Indexes of Factory Production

The tables following contain annual indexes of factory production for the years 1949–50 to 1966–67. They present indexes, on 1955–56 and 1959–60 bases respectively, for classes and combinations of classes of manufacturing industry. The indexes are designed to provide broad measures of growth in manufacturing industry over the period.

The indexes have been compiled by methods which are commonly adopted, the indexes for classes and combinations of classes comprising in fact indexes of the output of factory sub-classes at constant prices combined by the use of base period value-added weights. Indexes of this type are subject to a number of limitations, and can be compiled only on the basis of many assumptions and approximations. An understanding of the basis of the indexes is therefore essential if inappropriate use of the indexes is to be avoided. For a comprehensive treatment of concepts, sources, and methods, reference should be made to the annual mimeographed bulletin *Indexes of Factory Production*. This bulletin also contains indexes for a considerable number of individual factory sub-classes.

INDEXES OF FACTORY PRODUCTION(*a*): AUSTRALIA(*b*), 1949–50 TO 1959–60

(*Base of each index: year* 1955–56 = 100)

Class of industry	*Proportion of total value added(c) 1955–56*	*1949–50*	*1950–51*	*1951–52*	*1952–53*	*1953–54*	*1954–55*	*1955–56*	*1956–57*	*1957–58*	*1958–59*	*1959–60*
	per cent											
1. Treatment non-metal. mine, etc. products .	2.3	63	72	76	73	81	94	100	104	112	121	141
2. Bricks, etc. . .	2.1	76	78	86	78	89	96	100	92	96	103	117
3. Chemicals, etc. .	7.9	51	59	61	58	69	85	100	111	123	132	146
4. Industrial metals, etc.	39.8	63	74	78	75	83	93	100	102	114	122	137
6. Textiles, etc. . .	5.5	83	89	79	78	99	97	100	111	116	114	132
7. Skins, leather, etc. .	1.1	106	101	97	98	103	104	100	100	99	105	105
8. Clothing, etc. . .	6.8	87	93	89	84	96	97	100	99	102	104	109
9. Food, drink, etc. .	13.2	87	89	89	90	95	98	100	103	104	109	111
10. Sawmills, etc. . .	5.2	79	85	89	79	89	98	100	96	93	102	110
11. Furniture, etc. .	1.7	83	95	89	78	87	97	100	102	113	119	136
12. Paper, stationery, etc.	6.6	71	74	72	64	79	90	100	108	111	124	140
13. Rubber . . .	1.7	66	74	73	58	84	96	100	102	111	118	127
Other (Classes 5, 14, 15)(*d*) . . .	2.6	64	76	72	71	81	93	100	109	111	120	144
Classes 1 to 15 (combined) . .	*96.5*	*71*	*78*	*80*	*76*	*86*	*94*	*100*	*103*	*110*	*117*	*130*
16. Heat, light and power	3.5	62	68	73	76	83	92	100	108	116	123	132
All classes (combined)	**100.0**	**71**	**78**	**79**	**76**	**85**	**94**	**100**	**104**	**110**	**118**	**130**

(*a*) The indexes in this table are combinations of sub-class indexes of value of output as estimated at constant prices. Indexes for all sub-classes within the respective groupings have been combined according to the value-added weights of 1955–56. (*b*) Excludes factories in Northern Territory and Australian Capital Territory. (*c*) Value of production—*see* pages 1041 and 1063. (*d*) Combination of Class 5, Precious metals, jewellery, plate; Class 14, Musical instruments; and Class 15, Miscellaneous products.

INDEXES OF FACTORY PRODUCTION(*a*): AUSTRALIA(*b*), 1955–56 AND 1959–60 TO 1966–67

(*Base of each index: year* 1959–60 = 100)

Class of industry	*Proportion of total value added(c) 1959–60*	*1959–60*	*1960–61*	*1961–62*	*1962–63*	*1963–64*	*1964–65*	*1965–66*	*1966–67*
	per cent								
1. Treatment of non-metalliferous mine and quarry products .	2.5	100	113	114	122	137	149	153	157
2. Bricks, pottery, glass, etc. . .	2.2	100	101	97	104	116	129	127	134
3. Chemicals, dyes, explosives, paints oils, grease	8.6	100	104	113	123	136	151	158	174
4. Industrial metals, machines, conveyances	40.9	100	104	102	116	130	143	149	157
6. Textiles and textile goods (not dress)	5.2	100	98	100	111	121	128	130	138
7. Skins and leather (not clothing or footwear)	0.9	100	94	95	100	99	102	98	94
8. Clothing (except knitted) . .	5.7	100	103	105	111	116	121	125	132
9. Food, drink, and tobacco . .	12.5	100	103	108	113	118	127	133	140
10. Sawmills, joinery, boxes, etc. .	4.7	100	100	96	100	107	117	119	123
11. Furniture of wood, bedding, etc.	1.6	100	97	100	105	112	121	126	132
12. Paper, stationery, printing, etc. .	7.2	100	107	106	117	129	146	151	158
13. Rubber	1.6	100	102	99	115	126	132	132	140
Other (classes 5, 14 and 15)(*d*) .	2.5	100	102	106	120	139	157	168	200
Classes 1 to 15 (combined) .	*96.1*	*100*	*103*	*104*	*115*	*126*	*138*	*142*	152
16. Heat, light and power . .	3.9	100	107	112	127	135	149	158	170
All classes (combined) . .	**100.0**	**100**	**104**	**105**	**115**	**126**	**138**	**143**	**153**

(*a*) The indexes in this table are combinations of sub-class indexes of value of output as estimated at constant prices. Indexes for all sub-classes within the respective groupings have been combined according to the value-added weights of 1959–60. (*b*) Excludes factories in Northern Territory and Australian Capital Territory. (*c*) Value of production—*see* pages 1041 and 1063. (*d*) Combination of Class 5, Precious metals, jewellery, plate; Class 14, Musical instruments; and Class 15, Miscellaneous products.

Value of land, buildings, plant and machinery

The values recorded in this section are generally the values apportioned in the books of the individual firms after allowance has been made for depreciation, but they include estimates of the capital value of premises and plant rented. Consequently, the totals shown in the table do not represent the actual amount of capital invested in the items specified.

FACTORIES: VALUE OF LAND, BUILDINGS, PLANT AND MACHINERY(*a*) STATES AND TERRITORIES, 1967–68

($'000)

Value of—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Land and buildings	1,866,071	1,318,004	315,497	310,019	198,640	263,364	8,150	23,410	4,303,156
Plant and machinery	1,962,069	1,367,251	631,231	503,591	296,659	184,683	6,696	10,022	4,962,203
Total . .	**3,828,139**	**2,685,255**	**946,728**	**813,610**	**495,301**	**448,048**	**14,846**	**33,432**	**9,265,359**

(*a*) Depreciated or book values at 30 June including estimated value of rented premises and plant.

Value of land and buildings

FACTORIES: VALUE OF LAND AND BUILDINGS(*a*), STATES AND TERRITORIES 1963-64 TO 1967-68

($'000)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.(b)*
1963–64 . .	1,454,527	1,020,794	211,520	230,627	118,813	168,403	n.a.	n.a.	3,204,685
1964–65 . .	1,539,169	1,105,712	237,443	256,536	131,739	209,010	5,668	20,583	3,505,859
1965–66 . .	1,658,597	1,176,942	273,559	276,531	151,047	211,923	6,100	21,891	3,776,590
1966–67 . .	1,785,172	1,254,455	294,662	293,351	170,308	233,983	6,482	22,779	4,061,193
1967–68 . .	1,866,071	1,318,004	315,497	310,019	198,640	263,364	8,150	23,410	4,303,156

(*a*) Depreciated or book values at 30 June, including estimated value of rented premises. (*b*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

FACTORIES: VALUE OF LAND AND BUILDINGS(*a*), BY CLASS OF INDUSTRY AUSTRALIA(*b*), 1963-64 TO 1967-68

($'000)

Class of industry	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
1. Treatment of non-metalliferous mine and quarry products	72,616	76,489	82,525	86,126	90,486
2. Bricks, pottery, glass, etc.	68,470	73,402	79,323	86,770	89,650
3. Chemicals, dyes, explosives, paints, oils, grease	219,212	231,170	247,653	263,840	274,346
4. Industrial metals, machines, conveyances .	1,188,289	1,320,522	1,419,339	1,532,902	1,649,345
5. Precious metals, jewellery, plate . . .	11,657	16,597	16,584	17,443	18,254
6. Textiles and textile goods (not dress) . .	130,425	132,770	137,174	144,923	152,328
7. Skins and leather (not clothing or footwear) .	23,322	24,495	25,427	25,478	27,129
8. Clothing (except knitted)	135,959	147,996	156,895	164,304	170,698
9. Food, drink and tobacco	392,089	428,224	465,596	494,778	524,896
10. Sawmills, joinery, boxes, etc., wood turning and carving	90,956	100,165	107,406	115,475	120,701
11. Furniture of wood, bedding, etc. . .	44,142	49,601	52,594	57,401	63,003
12. Paper, stationery, printing, bookbinding, etc.	198,860	227,332	250,587	265,348	288,746
13. Rubber	50,595	52,322	58,796	64,271	64,101
14. Musical instruments	1,550	1,640	1,730	1,836	3,135
15. Miscellaneous products	64,090	69,571	74,873	85,761	92,875
Total, classes 1 to 15	*2,692,232*	*2,952,295*	*3,176,504*	*3,406,654*	*3,629,693*
16. Heat, light and power	512,453	553,565	600,087	654,539	673,462
Total, all classes	**3,204,685**	**3,505,859**	**3,776,590**	**4,061,193**	**4,303,156**

(*a*) Depreciated or book values at 30 June, including estimated value of rented premises. (*b*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

FACTORIES: VALUE OF LAND AND BUILDINGS(*a*), BY CLASS OF INDUSTRY STATES AND TERRITORIES, 1967-68

($'000)

Class of industry(b)	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1. Treatment non-metal. mine, etc. products .	31,463	29,637	7,675	10,134	8,283	2,133	443	718	90,486
2. Bricks, etc. . .	46,359	26,472	5,234	5,639	3,907	1,448	(*c*)	(*c*)	89,650
3. Chemicals, etc. .	144,388	84,898	11,555	10,912	18,335	3,871	(*c*)	(*c*)	274,346
4. Industrial metals, etc.	708,693	528,358	113,125	165,471	85,865	37,716	3,715	6,402	1,649,345
5. Jewellery, etc. . .	6,398	5,168	739	1,506	767	154	..	3,522	18,254
6. Textiles, etc. . .	47,899	90,487	2,874	4,770	1,493	4,805	..	..	152,328
7. Skins, leather, etc. .	13,336	10,163	1,068	1,408	1,097	58	..	..	27,129
8. Clothing, etc. . .	73,891	72,832	9,534	7,368	4,459	1,779	141	694	170,698
9. Food, drink, etc. .	159,930	187,945	81,563	39,166	32,316	20,851	1,544	1,582	524,896
10. Sawmills, etc. . .	45,195	37,893	11,156	11,084	7,674	6,284	445	970	120,701
11. Furniture, etc. . .	24,188	21,084	6,825	4,882	4,015	1,531	(*c*)	(*c*)	63,003
12. Paper, stationery, etc.	118,335	101,056	17,773	17,541	10,516	15,218	197	8,111	288,746
13. Rubber . . .	24,291	26,880	5,924	4,234	1,410	796	137	429	64,101
14. Musical instruments .	2,323	573	62	85	92	..	..	..	3,135
15. Miscellaneous . .	39,522	43,190	2,536	4,341	2,798	487	..	..	92,875
Total, classes 1 to 15	*1,486,211*	*1,266,635*	*277,643*	*288,541*	*183,026*	*97,129*	*7,098*	*23,410*	*3,629,694*
16. Heat, light and power	379,859	51,368	37,855	21,478	15,615	166,235	1,052	..	673,462
Total, all classes .	**1,866,071**	**1,318,004**	**315,497**	**310,019**	**198,640**	**263,364**	**8,150**	**23,410**	**4,303,156**

(*a*) Depreciated or book values at 30 June 1968, including estimated value of rented premises. (*b*) For full titles *see* table below. (*c*) Not available for publication.

Value of plant and machinery

FACTORIES: VALUE OF PLANT AND MACHINERY(*a*), STATES AND TERRITORIES 1963-64 TO 1967-68

($'000)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.(b)*
1963–64 . .	1,504,195	1,040,724	308,307	330,281	155,514	141,651	n.a.	n.a.	3,480,673
1964–65 . .	1,564,408	1,127,948	350,318	388,932	163,526	155,336	6,103	9,682	3,766,253
1965–66 . .	1,672,719	1,209,046	477,459	423,458	197,210	158,672	5,953	10,134	4,154,652
1966–67 . .	1,837,287	1,361,994	601,393	468,959	250,858	169,159	6,825	10,368	4,706,843
1967–68 . .	1,962,069	1,367,251	631,231	503,591	296,659	184,683	6,696	10,023	4,962,203

(*a*) Depreciated or book values at 30 June, including estimated value of rented plant and machinery. (*b*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

FACTORIES: VALUE OF PLANT AND MACHINERY(*a*), BY CLASS OF INDUSTRY AUSTRALIA(*b*), 1963-64 TO 1967-68

($'000)

Class of industry	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
1. Treatment of non-metalliferous mine and quarry products	155,387	171,063	197,365	206,403	220,318
2. Bricks, pottery, glass, etc.	70,476	76,841	84,789	90,183	97,623
3. Chemicals, dyes, explosives, paints, oils, grease	459,429	455,567	521,872	610,518	613,373
4. Industrial metals, machines, conveyances .	1,187,576	1,311,045	1,418,984	1,617,467	1,774,241
5. Precious metals, jewellery, plate . . .	3,454	7,060	7,197	7,632	7,870
6. Textiles and textile goods (not dress) . .	106,160	113,469	121,398	125,448	129,706
7. Skins and leather (not clothing or footwear)	9,472	10,206	10,215	10,357	10,880
8. Clothing (except knitted)	46,489	51,361	53,749	57,221	60,400
9. Food, drink and tobacco	383,922	438,152	499,512	534,232	561,607
10. Sawmills, joinery, boxes, etc., wood turning and carving	71,548	75,441	78,321	85,107	85,320
11. Furniture of wood, bedding, etc. . . .	11,137	12,020	12,902	13,450	14,141
12. Paper, stationery, printing, bookbinding, etc.	209,705	231,722	256,681	278,596	300,637
13. Rubber	36,532	41,208	54,194	60,281	59,765
14. Musical instruments	603	581	658	681	1,076
15. Miscellaneous products	46,137	54,444	59,571	64,713	71,713
Total, classes 1 to 15	*2,798,027*	*3,050,180*	*3,377,406*	*3,762,288*	*4,008,671*
16. Heat, light and power	682,646	716,072	777,245	944,555	953,531
Total, all classes	**3,480,673**	**3,766,253**	**4,154,652**	**4,706,843**	**4,962,203**

(*a*) Depreciated or book values at 30 June, including estimated value of rented plant and machinery. (*b*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

FACTORIES: VALUE OF PLANT AND MACHINERY(*a*), BY CLASS OF INDUSTRY STATES AND TERRITORIES, 1967-68

($'000)

Class of industry(b)	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1. Treatment non-metal. mine, etc., products	111,216	53,985	16,937	18,195	9,948	8,749	372	916	220,318
2. Bricks, etc.	44,130	30,582	7,347	7,279	5,806	1,316	(*c*)	(*c*)	97,623
3. Chemicals, etc.	282,452	185,775	58,176	33,899	44,721	7,356	(*c*)	(*c*)	613,373
4. Industrial metals, etc.	797,855	377,782	165,587	262,850	110,287	57,898	1,159	823	1,774,241
5. Jewellery, etc.	1,690	1,517	248	485	227	43	..	3,660	7,870
6. Textiles, etc.	41,372	72,178	2,620	4,222	1,729	7,583	..	..	129,706
7. Skins, leather, etc.	4,268	3,816	1,066	1,204	492	34	..	..	10,880
8. Clothing, etc.	22,360	27,504	3,929	3,980	1,694	632	46	255	60,400
9. Food, drink, etc.	132,160	166,705	185,469	32,195	24,556	18,944	881	697	561,607
10. Sawmills, etc.	29,776	18,294	11,925	9,892	8,229	6,848	132	224	85,320
11. Furniture, etc.	5,711	3,765	1,864	1,383	1,007	378	(*c*)	(*c*)	14,141
12. Paper, stationery, etc.	106,312	101,008	21,492	32,028	14,623	22,908	157	2,109	300,637
13. Rubber	21,282	28,551	2,436	5,683	1,286	323	72	131	59,765
14. Musical instruments	796	249	10	13	7	..	..	..	1,076
15. Miscellaneous	25,197	38,746	2,450	3,131	1,830	360	..	..	71,713
Total, classes 1 to 15	*1,626,578*	*1,110,458*	*481,555*	*416,441*	*226,442*	*133,371*	*3,804*	*10,022*	*4,008,671*
16. Heat, light and power	335,491	256,793	149,675	87,150	70,218	51,312	2,892	..	953,531
Total, all classes	**1,962,069**	**1,367,251**	**631,231**	**503,591**	**296,659**	**184,683**	**6,696**	**10,022**	**4,962,203**

(*a*) Depreciated or book values at 30 June 1968, including estimated value of rented plant and machinery. (*b*) For full titles, *see* table on page 1067. (*c*) Not available for publication.

Depreciation of land and buildings and plant and machinery

The following table shows, by class of industry, the allowance made for the depreciation of land and buildings and plant and machinery used in connection with the manufacturing industries in each State and Territory as recorded by factory proprietors at the annual census of factory production.

FACTORIES: ALLOWANCE FOR DEPRECIATION OF LAND AND BUILDINGS AND PLANT AND MACHINERY, BY CLASS OF INDUSTRY STATES AND TERRITORIES, 1967-68

($'000)

Class of industry(a)	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1. Treatment non-metal. mine, etc., products	13,026	8,639	2,406	1,898	1,245	509	95	110	27,927
2. Bricks, etc.	4,553	3,402	785	862	658	131	(*c*)	(*c*)	10,491
3. Chemicals, etc.	36,776	32,812	5,900	4,406	6,188	1,331	(*c*)	(*c*)	87,483
4. Industrial metals, etc.	92,629	46,501	12,467	31,805	7,768	3,497	121	82	194,870
5. Jewellery, etc.	180	144	19	55	23	3	..	192	618
6. Textiles, etc.	5,864	11,531	517	804	234	1,038	..	..	19,988
7. Skins, leather, etc.	457	467	97	215	76	3	..	..	1,316
8. Clothing, etc.	2,078	2,548	297	295	159	69	5	25	5,475
9. Food, drink, etc.	16,309	20,675	17,096	3,701	3,560	2,327	78	118	63,864
10. Sawmills, etc.	3,209	1,975	1,265	1,267	1,093	792	9	31	9,640
11. Furniture, etc.	643	402	216	161	112	39	(*c*)	(*c*)	1,575
12. Paper, stationery, etc.	11,882	12,964	2,675	2,818	1,537	3,009	22	260	35,166
13. Rubber	4,152	4,856	479	644	201	57	13	13	10,415
14. Musical instruments	115	17	1	(*b*)	1	..	..	..	135
15. Miscellaneous	3,939	6,203	278	485	194	12	..	..	11,111
Total, classes 1 to 15	*195,812*	*153,136*	*44,498*	*49,416*	*23,048*	*12,817*	*408*	*939*	*480,074*
16. Heat, light and power	28,041	22,383	8,626	5,711	4,940	2,357	490	..	72,548
Total all classes	**223,853**	**175,519**	**53,124**	**55,127**	**27,988**	**15,175**	**898**	**939**	**552,621**

(*a*) For full titles *see* table on page 1067. (*b*) Less than $500. (*c*) Not available for publication.

Land and buildings, plant and machinery—values, additions and replacements, depreciation

The following table summarises the recorded totals for Australia and also includes particulars of additions and replacements.

FACTORIES: VALUE OF LAND AND BUILDINGS, PLANT AND MACHINERY AUSTRALIA(*a*), 1963-64 TO 1967-68
($'000)

Year	*Book values at 30 June (b)*		*Additions and replacements during year(b)*		*Depreciation allowed during year*	
	Land and buildings	*Plant and machinery*	*Land and buildings*	*Plant and machinery*	*Land and buildings*	*Plant and machinery*
1963–64	3,204,685	3,480,673	192,419	564,958	39,711	336,929
1964–65	3,505,859	3,766,253	249,779	666,490	46,095	366,702
1965–66	3,776,590	4,154,652	272,052	773,322	51,895	407,388
1966–67	4,061,193	4,706,843	284,951	1,030,889	52,440	450,146
1967–68	4,303,156	4,962,203	270,762	760,894	58,412	494,210

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory. (*b*) Includes estimated values of rented premises, plant and machinery.

Principal factory products

The factory production of certain commodities is shown in the monthly and quarterly publications of this Bureau, in the series *Manufacturing Industries*, and in the bulletin *Manufacturing Commodities*, formerly *Secondary Industries, Part II.—Materials Used and Articles Produced in Factories*.

The following table shows the total recorded production of some of the principal articles (i.e. of those for which production can be represented in quantitative terms) manufactured in Australia. A more complete list, together with values, where available, is published in the aforementioned bulletin and in the mimeographed statement *Principal Factory Products*. Because of revisions, figures for some items for the year 1967–68 in the following table may differ from corresponding figures in earlier publications.

QUANTITIES OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES: AUSTRALIA(*a*) 1964-65 TO 1967-68

Article		*1964–65*	*1965–66*	*1966–67*	*1967–68*
Acid (in terms of 100%)—					
Hydrochloric	tons	4,491	5,447	6,765	7,918
Nitric	,,	24,817	25,522	31,009	35,033
Sulphuric	'000 tons	1,610	1,752	1,991	1,892
Aerated and carbonated waters	'000 gal	99,062	105,381	112,937	126,933
Air conditioning equipment—					
Room air conditioners (refrigerated) . .	No.	6,027	18,217	22,217	30,509
Room air coolers (evaporative coolers) . .	,,	2,886	6,000	10,414	18,363
Package unit air conditioners	,,	2,306	2,047	3,491	4,654
Asbestos cement building sheets (finished) .	'000 sq yd	32,477	32,364	32,609	36,251
Bags, leather, fibre, etc.—					
Handbags—					
Leather	No.	529,133	534,121	501,762	492,736
Plastic	'000	2,392	1,993	1,938	2,294
Other	No.	410,190	393,037	392,798	396,281
Hessian and calico bags	'000 doz	3,095	3,601	3,808	3,973
Suitcases, kitbags and trunks	'000	1,506	1,515	1,551	1,592
All other(*b*)	,,	2,187	2,128	2,057	1,988
Bath heaters—					
Electric	No.	14,087	13,524	11,701	11,777
Gas	,,	11,348	9,971	9,026	8,648
Solid fuel	,,	16,120	13,963	12,446	11,820

(*a*) Excludes Northern Territory and Australian Capital Territory. (*b*) Excludes canvas water bags.

QUANTITIES OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES AUSTRALIA(a), 1964–65 TO 1967–68—*continued*

Article		*1964–65*	*1965–66*	*1966–67*	*1967–68*
Bathing suits	doz	240,090	261,190	301,723	299,825
Baths—					
C.I.P.E.	No.	84,852	85,447	74,489	74,527
Other	„	67,523	67,068	79,988	87,413
Batteries, wet cell type—					
Auto (S.L.I.) 6 volts	'000	503	470	481	465
„ „ 12 volts	„	1,257	1,312	1,488	1,653
Radio, homelighter, fencer	No. of 2 volt cells	158,381	136,173	117,445	106,525
Traction, plant and other	„	63,717	78,066	99,537	70,518
Beer (excluding waste beer)	'000 gal	274,895	279,503	293,714	309,775
Biscuits	'000 lb	208,945	223,678	230,118	233,383
Blankets	'000	2,079	1,701	1,724	1,654
Boots and shoes (*see* Footwear)					
Bran (wheaten)	tons (2,000 lb)	228,746	206,127	202,183	195,862
Brandy	'000 proof gal	1,400	1,371	791	872
Brassieres	doz	673,551	719,739	792,574	815,130
Bread (2 lb loaf equivalent)	'000	781,317	787,841	803,649	789,098
Breakfast food, cereal (ready to eat)	cwt	878,533	904,040	900,231	935,523
Bricks, clay	mill.	1,353	1,360	1,361	1,440
Briquettes, brown coal	'000 tons	1,893	1,883	1,820	1,745
Butter	'000 lb	454,878	460,433	489,217	432,313
Cardigans, sweaters, etc.	'000 doz	1,418	1,432	1,436	1,378
Cement, Portland	'000 tons	3,746	3,688	3,661	3,805
Cheese (green weight)	'000 lb	138,008	131,300	153,834	155,385
Cigarettes and cigars	„	49,544	47,543	50,384	51,517
Cloth (including mixtures)—					
Cotton(b)	'000 sq yd	56,667	55,701	57,573	59,043
Rayon and acetate	„	32,016	32,985	35,692	37,226
Synthetic (non-cellulosic)	„	22,491	20,805	23,530	27,826
Wool	„	35,300	32,588	30,635	32,599
Coke—					
Metallurgical	'000 tons	3,118	3,179	3,365	3,678
Other	tons	632,501	599,301	551,326	507,253
Concrete, ready mixed	'000 cu yd	6,060	6,736	7,000	7,955
Confectionery—					
Chocolate	'000 lb	95,634	104,312	104,937	98,984
Other	„	106,274	107,856	111,796	112,848
Copper, refined(c)	tons	53,441	91,588	74,313	71,952
Coppers (wash boilers)—					
Electric	No.	11,051	9,113	8,011	9,462
Gas	„	7,503	5,740	4,949	6,464
Inserts	„	18,213	19,074	9,047	(e)
Cordials and syrups	'000 gal	8,295	9,144	9,160	9,776
Corsets and corselets	doz	342,336	380,835	393,231	418,145
Cycles, (complete)	No.	67,874	63,641	69,365	90,671
Dentifrices (toothpaste)	'000 lb	9,799	9,774	10,773	10,190
Electric generators—					
Non-automatic—Alternating current	No.	1,480	1,676	1,763	2,111
Direct current	„	1,139	1,022	708	632
Electricity	mill. kWh	35,641	38,279	41,484	44,531
Electrodes for manual welding	'000 lb	47,654	43,555	45,656	45,124
Engines, internal combustion(d)	'000	306	245	288	258
Essences, flavouring—					
Domestic	gal	130,532	134,011	100,460	90,861
Industrial	„	587,753	599,426	733,289	840,894
Face powder	lb	310,586	285,870	376,236	298 233
Fans, electric	No.	204,285	223,409	321,600	360,346
Fish, canned (including fish loaf)	'000 lb	10,910	11,849	13,713	17,403

(a) Excludes Northern Territory and Australian Capital Territory. (b) Excludes tyre-cord fabric. (c) Primary origin only. (d) Petrol and diesel. Excludes car, motor cycle, truck, tractor, aero, and marine engines. (e) Not available for publication.

QUANTITIES OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES AUSTRALIA(*a*), 1964–65 TO 1967–68—*continued*

Article		*1964–65*	*1965–66*	*1966–67*	*1967–68*
Floorboards—					
Australian timber	'000 super ft	160,165	162,710	154,286	151,130
Imported timber	"	798	721	324	463
Floor coverings—					
Textile	'000 sq yd	11,542	11,692	12,624	12,758
Smooth surface	"	11,869	14,041	12,150	14,524
Underfelts, underlays, etc.	"	11,158	11,067	(*h*)14,802	(*h*)16,613
Floor polishers, electric	No.	105,077	89,193	88,840	72,657
Flour—					
Self-raising	'000 cwt	902	864	832	775
Wheaten(*b*)	'000 tons (2,000 lb)	1,553	1,414	1,392	1,419
Footwear (not rubber)—					
Boots, shoes and sandals	'000 pairs	35,306	34,949	37,011	38,076
Slippers	"	5,512	4,609	4,454	4,298
Fruit juices, natural—					
Single strength	'000 gal	10,106	10,727	13,674	14,630
Concentrated(*c*)	"	753	815	1,139	971
Gas (town)	mill. cubic ft	55,260	55,742	56,743	58,070
Gloves—					
Dress	doz pairs	28,299	26,163	27,761	30,913
Work—					
Sewn(*d*)	'000 doz pairs	407	382	358	371
Dipped	"	1,195	1,309	1,343	1,539
Glucose	'000 lb	57,444	60,779	65,422	61,945
Golf clubs	doz	28,635	33,145	40,680	38,082
Handkerchiefs—					
Men's	'000 doz	2,089	1,901	1,721	1,971
Women's	"	1,603	1,507	1,333	1,205
Heaters, room—					
Solid fuel	No.	47,883	37,967	31,606	24,558
Radiators and electric fires	"	749,889	706,943	600,294	623,950
Gas fires and space heaters, domestic	"	30,858	31,185	38,764	38,268
Ice	tons	205,545	198,701	190,274	187,306
Ice cream	'000 gal	25,019	30,026	34,974	37,423
Infants' and invalids' milk-based health beverages(*e*)	'000 lb	45,179	45,280	49,348	48,234
Ink, printing—					
News	"	14,948	14,900	16,190	17,401
Other	"	13,545	13,971	14,782	15,440
Iron and steel—					
Pig iron	'000 tons	3,936	4,380	4,893	5,209
Steel ingots, open hearth and electric	"	5,131	5,561	6,114	6,287
Blooms and slabs	"	4,503	4,823	4,978	5,372
Irons, electric (hand, domestic)	No.	430,326	450,230	507,882	465,501
Jams (including conserves, jellies, etc.)	'000 lb	89,362	97,149	90,761	83,917
Lard	"	5,356	5,853	6,670	6,475
Lawn mowers—					
Petrol, rotary	No.	201,125	176,396	219,826	184,908
Other types(*f*)	"	10,799	11,403	11,235	11,688
Lead refined(*g*)	tons	199,032	188,197	192,429	186,908
Leather—					
Dressed or finished—					
Chrome tanned (including retanned)	'000 sq ft	85,900	83,175	71,954	72,214
Vegetable tanned, by weight	'000 lb	19,865	15,326	12,883	11,296
Vegetable tanned, by measurement	'000 sq ft	4,036	3,956	4,009	3,303
Tanned or dressed skins with hair or wool retained	doz	88,592	117,778	82,018	110,381

(*a*) Excludes Northern Territory and Australian Capital Territory. (*b*) Includes wheatmeal for baking and sharps and atta flour. (*c*) Excludes grape must. (*d*) Excludes fabric liners for dipped gloves but includes moulded or heat sealed work gloves. (*e*) Includes malted milk and milk sugar (lactose). (*f*) Petrol cylinder, electric and hand. (*g*) Includes lead content of lead only from primary sources, but excludes lead-silver bullion produced for export. (*h*) New basis—Needled (or bonded) felts of jute or jute/hair mixtures (for all purposes) as from July 1966.

QUANTITIES OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES AUSTRALIA(*a*), 1964–65 TO 1967–68—*continued*

Article		*1964–65*	*1965–66*	*1966–67*	*1967–68*
Lime—					
Crushed	tons	200,040	219,912	249,807	253,755
Hydrated	,,	89,840	96,566	97,544	95,539
Quick	,,	133,957	143,311	155,173	179,536
Lipstick	lb	65,458	70,104	74,842	72,323
Malt (excluding extract)	'000 bus	12,328	13,444	14,239	13,776
Margarine—					
Table	'000 lb	50,937	53,698	48,356	35,576
Other	,,	69,060	67,884	76,138	89,285
Mattresses and bed bases—					
Box spring	No.	64,699	80,319	100,362	118,883
Inner spring	,,	727,248	705,702	682,587	659,452
Woven wire, link mesh and spring	,,	510,492	557,344	638,726	621,502
Other	,,	294,074	273,040	302,882	304,533
Meat, canned(*b*)	'000 lb	115,578	113,051	100,849	106,956
Meters—					
Electric (domestic)(*c*)	No.	302,532	302,511	296,571	304,905
Gas	,,	50,010	41,443	37,884	37,831
Water	,,	127,316	141,042	146,915	148,839
Milk, condensed, concentrated and evaporated—					
Full cream, sweetened	'000 lb	102,479	73,985	61,510	47,316
Full cream, unsweetened	,,	89,390	88,482	91,700	87,946
Skim	,,	21,936	22,047	24,974	18,932
Milk powder—					
Full cream	,,	43,669	45,060	48,018	47,272
Skim	,,	107,823	112,342	188,584	196,029
Buttermilk or mixed skim and buttermilk	,,	20,885	25,900	32,518	33,592
Motors, electric	'000	2,585	2,510	2,667	2,911
Motor vehicles, finished—					
Cars	No.	250,477	235,326	238,720	270,963
Station wagons	,,	83,992	58,334	57,534	59,047
Utilities	,,	25,661	33,038	33,909	31,174
Panel vans	,,	12,972	14,427	14,013	14,687
Truck and truck-type vehicles	,,	1,220	766	768	1,137
Motor vehicles, partly finished—	,,				
Cars, station wagons, utilities, vans		1,825	1,666	1,381	1,663
Trucks and truck-type vehicles	,,	27,029	20,856	21,747	21,857
Motor vehicle safety belts	,,	437,189	426,847	801,448	962,851
Nails	tons	26,802	23,414	23,830	22,925
Neckties	doz	494,107	496,989	490,677	498,503
Oatmeal and rolled oats—					
For porridge, etc.	cwt	319,950	313,987	340,781	314,319
Other	,,	536,211	397,401	308,712	116,034
Oils, vegetable, crude	'000 lb	87,676	87,903	84,519	95,033
Paints, etc.—					
Paints, (not water) and enamels ready for use	'000 gal	16,260	15,188	16,037	16,473
in paste form	'000 lb	2,926	3,158	2,589	2,238
Lacquers (nitro-cellulose)	'000 gal	1,563	1,437	1,427	1,427
Tinting colours, packaged ready for sale	,,	57	54	57	68
Stains and clear varnishes packaged ready for sale	,,	899	845	913	875
Water paints—					
Emulsion type	,,	3,710	4,321	4,193	4,357
In powder form	'000 lb	2,269	1,945	1,935	1,431
Thinners	'000 gal	4,163	4,018	4,031	4,221
Paper—					
Newsprint	tons	93,142	93,211	97,255	92,648
Other	,,	341,642	351,303	389,223	385,567

(*a*) Excludes Northern Territory and Australian Capital Territory. (*b*) Excludes poultry and baby food. (*c*) New basis—electricity consumption meters from 1 July 1965.

QUANTITIES OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES AUSTRALIA(*a*), 1964–65 TO 1967–68—*continued*

Article		*1964–65*	*1965–66*	*1966–67*	*1967–68*
Paperboard	tons	296,387	317,553	329,496	334,660
Perambulators, pushers and strollers	No.	135,621	132,499	133,018	139,082
Petrol—					
For blending and refining	million gal	52	45	1,766	50
Other (all types)	,,	1,495	1,609		1,911
Plaster of paris	tons	277,445	265,553	261,054	278,225
Plaster sheets	'000 sq yd	29,937	29,917	30,601	32,809
Plywood, $\frac{3}{16}$ inch basis	'000 sq ft	217,059	187,258	200,451	229,024
Pollard	tons (2,000 lb)	326,418	303,162	284,628	305,468
Preserves—					
Fruit—					
Canned or bottled	'000 lb	513,713	579,619	611,552	659,700
Pulp and puree—single strength	'000 cwt	86	62	51	44
Vegetables—					
Canned or bottled	'000 lb	152,117	180,098	194,834	182,051
Quick frozen	,,	77,254	93,885	118,216	100,862
Pyjamas—					
Men's and boys' (suits only)	doz	430,589	480,396	422,640	420,563
Women's and girls' (incl. nightdresses)	,,	711,139	726,711	722,519	746,779
Racquet frames (all types)	,,	16,190	15,308	16,866	15,798
Radio receiving sets (including radiograms)	No.	455,970	392,526	445,766	522,394
Records (phonograph)—					
Single play (78 and 45 rpm)	'000	4,198	4,295	4,727	5,296
Extended play	,,	1,474	1,486	2,103	1,869
Long play	,,	4,459	5,086	6,714	6,847
Refrigerators, domestic	No.	227,728	213,870	232,200	245,138
Resins, plastic and synthetic, for all purposes	'000 cwt	2,123	2,434	2,854	3,349
Rice, polished, unpolished and broken	,,	1,969	2,080	2,373	(*b*)
Ropes and cables (excluding wire)	cwt	140,770	133,355	130,845	117,670
Rugs	'000	201	175	191	170
Sauce	'000 pints	38,271	46,111	42,213	43,692
Semolina	tons (2,000 lb)	16,532	18,744	20,777	24,287
Shirts (men's and boys')	'000 doz	2,146	2,266	2,214	2,226
Sink heaters, electric	No.	12,155	10,646	10,174	9,941
Sinks, steel	,,	219,370	219,409	226,158	212,824
Soap, for personal toilet use	'000 cwt	465	478	483	500
Socks and stockings—					
Men's and youths'	'000 doz pairs	1,707	1,690	1,815	1,910
Women's and maids'	,,	4,440	4,563	4,971	5,257
Children's and infants'	,,	1,025	903	1,045	1,004
Soup—					
Canned	'000 pints	63,077	72,032	78,985	67,201
Dry-mix	'000 lb	7,291	8,272	8,803	9,127
Starch	,,	147,184	161,243	165,316	183,800
Stearine (stearic acid)	,,	11,538	9,647	10,722	11,780
Steel, constructional, fabricated	tons	509,121	542,267	567,342	584,791
Stoves, ovens and ranges, domestic cooking—					
Electric(*c*)	No.	180,541	188,132	192,655	193,627
Gas(*d*)	,,	84,503	71,265	75,482	73,127
Solid fuel	,,	23,612	20,859	18,785	14,921
Sugar—					
Raw (94 net titre)	'000 tons	1,950	1,953	2,343	2,334
Refined	,,	592	609	613	614
Sulphate of ammonia	tons	108,275	118,387	110,246	87,007
Superphosphate	'000 tons	(*e*) 3,703	(*f*) 4,265	(*f*) 4,430	(*f*)3,934
Talcum powder	'000 lb	7,835	6,860	8,104	8,974

(*a*) Excludes Northern Territory and Australian Capital Territory. (*b*) Not available for publication. (*c*) Includes wall ovens but excludes cooking tops and portable units. (*d*) Upright and elevated (with oven) including wall ovens, but excluding hotplates, stovettes, etc. (*e*) Source: Department of Primary Industry. Figures from June 1964 to June 1965 include double and triple superphosphate and ammonium phosphate expressed in terms of single phosphate, i.e. 22% P_2O_5 equivalent. (*f*) From 1 July 1965 excludes ammonium phosphate.

QUANTITIES OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES AUSTRALIA(a), 1964–65 TO 1967–68—*continued*

Article		*1964–65*	*1965–66*	*1966–67*	*1967–68*
Tallow (including dripping), rendering—					
Edible	'000 lb	161,967	148,628	150,789	148,099
Inedible	,,	391,152	345,104	361,588	353,901
Television sets	No.	308,737	276,586	254,811	253,247
Television picture tubes	,,	400,675	361,534	368,517	342,159
Tiles, roofing—					
Cement	'000	87,744	82,921	88,509	96,831
Terracotta	,,	52,984	51,258	47,290	47,470
Timber—					
From native logs—					
Hardwood, etc.	'000 super ft	1,203,705	1,185,831	1,151,369	1,173,931
Softwood	,,	329,509	331,708	317,591	307,683
From imported logs	,,	36,346	27,892	25,771	32,379
Toasters, electric (domestic)	No.	321,042	329,626	366,972	331,717
Tobacco	'000 lb	8,993	8,407	7,595	7,463
Tomato juice	'000 gal	987	1,927	2,627	2,463
,, paste and puree	'000 pints	16,373	22,428	22,776	11,546
,, pulp	'000 cwt	168	133	181	193
Towels	'000 doz	895	960	992	892
Toilet cisterns	No.	359,944	340,895	352,791	370,426
Transformers, chokes and ballasts, for distribution of power and light, etc.	,,	22,308	19,361	16,823	15,892
Tubes, pneumatic(*b*)	'000	3,651	3,823	4,051	4,351
Twine (all types)	cwt	195,461	174,646	248,825	185,966
Tyres, pneumatic(*b*)	'000	5,530	5,613	5,806	6,762
Umbrellas, street and general purpose	No.	764,510	716,987	825,032	930,266
Underwear (men's, women's, children's)	'000 doz	6,231	6,305	6,179	6,612
Vacuum cleaners (domestic)	No.	181,326	181,691	156,307	163,613
Wash basins—					
C.I.P.E.	,,	71,430	64,126	58,040	52,919
Earthenware	,,	149,257	140,652	146,546	159,480
Pressed steel	,,	56,126	62,852	78,893	91,796
Washing machines, household, electric	,,	264,001	240,189	231,601	278,348
Weatherboards—					
Australian timber	'000 super ft	20,599	20,307	19,025	18,799
Imported timber	,,	3,094	2,583	1,857	2,175
Wheatmeal for stock feed	tons (2,000 lb)	207,696	284,474	228,872	283,589
Wheelbarrows (metal)	No.	111,366	116,838	123,291	118,797
Wine, beverage—					
Fortified	'000 gal	11,137	9,678	12,401	11,545
Unfortified	,,	8,697	8,663	12,020	14,458
Wood pulp	tons	317,435	330,625	357,665	351,268
Wool, scoured or carbonised	'000 lb	158,832	156,113	154,119	157,860
Wool tops, pure	,,	45,835	45,798	44,535	42,439
Yarn (including mixtures)—					
Cotton	..	59,092	59,021	60,792	60,849
Woollen	,,	30,647	30,534	32,641	34,596
Wool worsted	,,	23,532	21,519	18,781	18,896
Rayon and acetate, spun	,,	6,218	5,970	6,771	9,213
Synthetic (non-cellulosic) fibres spun	,,	6,387	6,720	8,843	9,542
Zinc, refined(*c*)	tons	189,395	196,534	197,030	187,565

(*a*) Excludes Northern Territory and Australian Capital Territory. (*b*) Excludes bicycle and 'other'. (*c*) Primary origin only—includes small quantities of zinc dust.

Individual industries

Particulars on pages 1043–1068 afford a general view of the magnitude of industries in the sixteen groups adopted by the Conference of Statisticians in 1930. While it is not possible within the limits of this publication to give a detailed account of each industry, particular industries dealt with hereunder are of special importance because of the employment which they provide for labour or capital, or for other features of special interest. Details for individual States are available from publications issued by the Deputy Commonwealth Statistician in each State and, for selected industries, in the Central Office series *Manufacturing Industries.*

PORTLAND CEMENT, ASBESTOS CEMENT SHEETS, ETC., AND OTHER CEMENT GOODS: AUSTRALIA, 1967-68

		Portland cement	*Asbestos cement sheets and mouldings*	*Other cement goods*	*Total*
Number of factories		17	15	817	849
Number of persons employed		3,515	3,086	9,534	16,135
Salaries and wages paid	$'000	11,923	10,325	30,733	52,981
Value of power, fuel, etc., used	,,	12,642	1,372	1,901	15,916
Value of materials used	,,	22,057	16,285	115,482	153,824
Value of production	,,	38,789	23,023	70,885	132,697
Total value of output	,,	73,487	40,680	188,269	302,437
Value of land and buildings	,,	17,747	10,898	25,044	53,689
Value of plant and machinery	,,	89,068	10,022	28,897	127,987
Horsepower of engines ordinarily in use		157,670	29,223	50,594	237,487

PORTLAND CEMENT, ASBESTOS CEMENT SHEETS, ETC., AND OTHER CEMENT GOODS: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		669	702	761	802	849
Number of persons employed		14,230	15,070	15,327	15,483	16,135
Salaries and wages paid	$'000	37,050	42,339	44,541	47,732	52,981
Value of power, fuel, etc., used	,,	13,689	15,631	15,156	15,037	15,916
Value of materials used	,,	103,035	120,439	129,821	135,971	153,824
Value of production	,,	91,570	103,887	106,460	119,527	132,697
Total value of output	,,	208,294	239,957	251,437	270,535	302,437
Value of land and buildings	,,	37,465	40,555	45,648	49,071	53,689
Value of plant and machinery	,,	76,667	87,093	103,212	117,469	127,987
Horsepower of engines ordinarily in use		170,763	206,585	218,387	235,609	237,487

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

BRICKS, TILES, POTTERY AND EARTHENWARE: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		412	406	393	388	370
Number of persons employed		15,132	15,467	15,636	15,290	15,417
Salaries and wages paid	$'000	36,416	40,544	41,317	43,347	46,272
Value of power, fuel, etc., used	,,	13,240	14,092	14,152	14,635	16,157
Value of materials used	,,	21,931	26,089	27,111	28,647	31,278
Value of production	,,	65,622	77,607	77,217	83,133	93,024
Total value of output	,,	100,792	117,788	118,481	126,415	140,459
Value of land and buildings	,,	35,675	38,738	41,375	44,105	47,178
Value of plant and machinery	,,	49,165	55,320	59,146	62,929	68,438
Horsepower of engines ordinarily in use		127,124	137,727	147,103	149,017	155,247

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

GLASS AND GLASS BOTTLES: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		263	268	271	274	273
Number of persons employed		10,382	11,391	11,402	11,530	11,600
Salaries and wages paid	$'000	24,231	28,695	30,220	33,510	35,948
Value of power, fuel, etc., used	„	6,485	6,425	6,155	6,465	7,083
Value of materials used	„	37,259	42,779	41,717	45,996	50,472
Value of production	„	47,454	53,704	57,636	62,401	69,432
Total value of output	„	91,197	102,908	105,508	114,862	126,986
Value of land and buildings	„	32,567	34,480	37,761	42,411	42,180
Value of plant and machinery	„	21,256	21,472	25,604	27,221	29,126
Horsepower of engines ordinarily in use		41,527	41,849	46,320	50,573	49,862

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

In order to avoid the publication of confidential information, particulars relating to industrial and heavy chemicals include details for the explosives industry.

INDUSTRIAL AND HEAVY CHEMICALS AND ACIDS (INCLUDING EXPLOSIVES) AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		325	323	326	334	336
Number of persons employed		15,075	16,511	16,668	17,505	17,694
Salaries and wages paid	$'000	42,158	49,876	52,179	60,063	63,579
Value of power, fuel, etc., used	„	15,627	18,249	17,847	20,698	23,777
Value of materials used	„	133,473	157,975	166,441	193,730	205,985
Value of production	„	125,599	146,062	150,135	168,307	195,127
Total value of output	„	274,698	322,286	334,423	382,736	424,890
Value of land and buildings	„	75,208	78,090	84,336	90,751	92,860
Value of plant and machinery	„	151,235	160,853	174,484	218,387	224,793
Horsepower of engines ordinarily in use		205,235	225,599	257,132	301,984	334,922

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

PHARMACEUTICAL AND TOILET PREPARATIONS: AUSTRALIA(*a*) 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		213	230	236	227	228
Number of persons employed		8,173	8,818	9,342	9,782	10,010
Salaries and wages paid	$'000	16,904	19,492	21,667	24,251	26,148
Value of power, fuel, etc., used	„	1,070	1,228	1,411	1,586	1,657
Value of materials used	„	56,454	64,061	68,577	75,843	80,631
Value of production	„	73,418	84,588	88,243	103,568	112,942
Total value of output	„	130,943	149,877	158,231	180,997	195,230
Value of land and buildings	„	37,474	39,739	43,294	45,333	50,161
Value of plant and machinery	„	13,440	14,283	16,806	18,145	18,951
Horsepower of engines ordinarily in use		21,808	24,873	27,396	28,366	30,282

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

WHITE LEAD, PAINTS AND VARNISH: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		184	196	197	208	212
Number of persons employed		5,356	5,605	5,665	5,789	5,858
Salaries and wages paid	$'000	12,845	14,297	15,153	16,425	17,131
Value of power, fuel, etc., used	,,	876	959	969	1,049	1,108
Value of materials used	,,	62,494	66,495	64,914	67,187	69,953
Value of production	,,	36,674	40,196	40,605	44,107	48,241
Total value of output	,,	100,044	107,650	106,487	112,342	119,302
Value of land and buildings	,,	17,888	19,495	19,550	21,976	22,091
Value of plant and machinery	,,	10,438	10,957	10,668	11,078	11,320
Horsepower of engines ordinarily in use		32,695	33,816	35,483	36,419	37,677

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

MINERAL OILS: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		82	85	87	89	91
Number of persons employed		5,159	5,408	5,775	5,779	5,752
Salaries and wages paid	$'000	17,066	18,610	21,171	23,281	24,586
Value of power, fuel, etc., used	,,	20,906	23,319	24,977	26,920	30,224
Value of materials used	,,	297,591	314,040	325,230	355,694	409,290
Value of production	,,	97,628	107,285	132,262	157,533	176,559
Total value of output	,,	416,125	444,644	482,469	540,147	616,072
Value of land and buildings	,,	42,606	42,705	45,596	46,806	46,339
Value of plant and machinery	,,	232,193	215,046	250,672	282,171	268,149
Horsepower of engines ordinarily in use		203,325	215,339	263,226	284,997	302,025

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

SOAP AND CANDLES: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		122	118	124	138	133
Number of persons employed		3,232	3,130	3,196	3,384	3,360
Salaries and wages paid	$'000	7,679	8,265	8,596	9,741	11,120
Value of power, fuel, etc., used	,,	832	902	844	845	876
Value of materials used	,,	34,956	38,600	43,124	44,368	46,613
Value of production	,,	34,610	38,205	41,389	50,770	46,139
Total value of output	,,	70,398	77,707	85,357	95,983	93,628
Value of land and buildings	,,	6,546	8,373	8,853	9,157	9,039
Value of plant and machinery	,,	6,824	7,054	8,732	9,453	9,710
Horsepower of engines ordinarily in use		16,812	17,058	15,948	17,875	18,003

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

CHEMICAL FERTILISERS: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		48	48	48	48	48
Number of persons employed		4,476	4,633	4,802	4,741	4,830
Salaries and wages paid	$'000	11,842	13,415	15,101	15,778	16,505
Value of power, fuel, etc., used	,,	2,022	2,395	2,959	3,004	2,684
Value of materials used	,,	65,699	77,860	93,969	113,155	115,094
Value of production	,,	26,059	31,111	31,435	44,274	46,936
Total value of output	,,	93,780	111,366	128,363	160,433	164,714
Value of land and buildings	,,	14,412	16,238	16,525	19,639	23,083
Value of plant and machinery	,,	20,739	27,167	37,618	46,997	56,570
Horsepower of engines ordinarily in use		68,689	74,467	91,221	85,231	100,457

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

SMELTING, CONVERTING, REFINING, AND ROLLING OF IRON AND STEEL AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		30	31	32	33	37
Number of persons employed . . .		37,094	38,469	39,146	39,014	39,956
Salaries and wages paid . .	$'000	120,041	115,917	121,972	126,708	139,641
Value of power, fuel, etc., used	„	78,955	84,413	90,637	102,971	110,412
Value of materials used . .	„	390,414	426,217	422,786	437,095	459,746
Value of production . .	„	231,902	266,937	249,795	289,446	304,919
Total value of output . .	„	701,271	777,567	763,218	829,511	875,077
Value of land and buildings .	„	83,708	87,252	88,387	89,956	106,958
Value of plant and machinery .	„	410,432	440,909	482,284	524,513	623,289
Horsepower of engines ordinarily in use .		943,974	1,019,335	1,075,145	1,139,234	1,311,792

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

FOUNDRIES—FERROUS: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		230	228	224	211	207
Number of persons employed . . .		8,152	8,749	8,855	8,411	8,253
Salaries and wages paid . .	$'000	19,942	24,338	25,069	24,931	25,548
Value of power, fuel, etc., used	„	2,482	2,856	2,931	2,835	3,048
Value of materials used . .	„	20,069	23,943	23,445	25,991	25,008
Value of production . .	„	29,478	36,545	38,014	36,414	36,958
Total value of output . .	„	52,029	63,344	64,390	65,241	65,014
Value of land and buildings .	„	12,652	13,032	12,650	13,512	15,792
Value of plant and machinery .	„	8,574	9,124	10,076	12,084	13,231
Horsepower of engines ordinarily in use .		34,581	34,711	34,919	36,233	36,805

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

PLANT, EQUIPMENT AND MACHINERY (INCLUDING MACHINE TOOLS) AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		3,027	3,294	3,474	3,687	3,820
Number of persons employed . . .		87,277	94,980	100,967	101,152	104,139
Salaries and wages paid . .	$'000	212,937	252,401	276,896	293,871	322,705
Value of power, fuel, etc., used	„	9,102	10,071	10,511	10,888	11,842
Value of materials used . .	„	389,996	449,151	480,040	495,160	546,851
Value of production . .	„	357,982	425,060	459,327	502,002	540,679
Total value of output . .	„	757,080	884,282	949,877	1,008,050	1,099,373
Value of land and buildings .	„	178,429	199,184	221,370	245,733	264,249
Value of plant and machinery .	„	105,786	120,380	129,838	139,993	155,087
Horsepower of engines ordinarily in use .		321,550	332,041	365,776	381,342	401,491

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

OTHER ENGINEERING(*a*): AUSTRALIA(*b*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		2,449	2,514	2,597	2,665	2,747
Number of persons employed . . .		30,044	31,759	32,823	33,850	34,667
Salaries and wages paid . .	$'000	69,093	78,649	84,632	92,442	101,175
Value of power, fuel, etc., used	„	2,667	2,966	3,032	3,347	3,734
Value of materials used . .	„	91,145	104,778	109,007	114,973	125,576
Value of production . .	„	112,492	129,498	139,533	153,459	165,518
Total value of output . .	„	206,304	237,241	251,573	271,779	294,828
Value of land and buildings .	„	58,584	64,014	69,998	79,778	85,662
Value of plant and machinery .	„	40,194	43,800	47,871	58,889	61,953
Horsepower of engines ordinarily in use .		114,317	122,086	132,552	153,257	159,966

(*a*) Jobbing and general engineering works, n.e.i. (*b*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

The following table shows particulars of establishments engaged in metal extraction and ore reduction including secondary recovery of metals, but excluding blast furnaces engaged in production of pig iron from iron ore. Ore dressing and elementary smelting of metallic minerals (e.g. in the case of gold), when these are carried out in an associated plant at or near the mine, are included in the mineral industry (*see* the chapter Mineral Industry).

EXTRACTING AND REFINING OF NON-FERROUS METALS; ALLOYS AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		68	70	74	77	75
Number of persons employed . . .		8,960	8,990	9,349	9,966	10,642
Salaries and wages paid . .	$'000	25,996	28,722	31,289	34,778	39,871
Value of power, fuel, etc., used	„	17,840	19,643	21,277	24,151	28,460
Value of materials used . .	„	235,481	274,354	320,380	324,231	364,161
Value of production . .	„	62,349	76,960	103,397	117,519	146,520
Total value of output . .	„	315,670	370,957	445,054	465,901	539,141
Value of land and buildings .	„	37,881	40,538	41,477	55,507	59,954
Value of plant and machinery .	„	100,851	107,294	110,421	225,256	236,270
Horsepower of engines ordinarily in use .		118,723	121,473	122,444	172,426	196,646

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

ELECTRICAL MACHINERY, CABLES AND APPARATUS AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		1,438	1,517	1,614	1,713	1,761
Number of persons employed . . .		59,416	65,233	67,582	70,480	71,079
Salaries and wages paid . .	$'000	135,806	159,359	174,616	189,970	201,439
Value of power, fuel, etc., used	„	6,841	7,473	7,550	8,227	8,745
Value of materials used . .	„	263,668	321,409	332,239	366,486	387,869
Value of production . .	„	229,536	260,268	298,176	324,254	334,845
Total value of output . .	„	500,045	589,151	637,966	698,966	731,459
Value of land and buildings .	„	110,908	124,575	131,455	147,874	156,402
Value of plant and machinery .	„	62,233	68,796	75,592	79,580	82,317
Horsepower of engines ordinarily in use .		142,213	153,438	158,915	169,999	178,266

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

The railway and tramway workshops, which form an important part of Class 4, are owned chiefly by State governments and local authorities. *Workshops (thirteen in 1967–68) controlled by non-public bodies are not included in the figures below.*

TRAMCARS AND RAILWAY ROLLING STOCK(*a*)
AUSTRALIA(*b*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		119	120	120	120	119
Number of persons employed		33,689	32,215	31,534	30,703	29,935
Salaries and wages paid	$'000	73,267	75,783	77,405	81,290	79,579
Value of power, fuel, etc., used	„	2,162	2,089	2,141	2,054	2,018
Value of materials used	„	39,622	40,785	44,280	46,522	45,424
Value of production	„	92,435	91,899	94,815	100,003	100,567
Total value of output	„	134,219	134,773	141,236	148,578	148,008
Value of land and buildings	„	29,372	29,353	30,254	30,497	30,815
Value of plant and machinery	„	38,456	39,704	39,509	39,907	39,498
Horsepower of engines ordinarily in use		114,456	116,445	116,701	112,964	112,431

(*a*) Government and local authority only. (*b*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

MOTOR VEHICLES—CONSTRUCTION, ASSEMBLY, REPAIRS, ETC.
AUSTRALIA, 1967-68

		Construction and assembly	*Repairs*	*Motor bodies* (*a*)	*Motor accessories*	*Total*
Number of factories		51	12,336	2,850	382	15,619
Number of persons employed		25,951	75,103	40,254	21,013	162,321
Salaries and wages paid	$'000	83,038	168,913	113,630	60,787	426,368
Value of power, fuel, etc., used	„	6,270	5,088	4,502	3,818	19,678
Value of materials used	„	187,798	187,254	263,488	98,512	737,052
Value of production	„	138,342	270,893	198,191	100,895	708,321
Total value of output	„	332,409	463,235	466,181	203,225	1,465,050
Value of land and buildings	„	94,904	251,607	115,184	45,570	507,264
Value of plant and machinery	„	78,785	35,822	69,320	42,695	226,622
Horsepower of engines ordinarily in use		128,706	93,641	115,631	81,958	419,936

(*a*) Includes motor body repairing, panel beating, duco spraying, etc.

MOTOR VEHICLES—CONSTRUCTION, ASSEMBLY, REPAIRS, ETC.
AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		13,866	14,466	14,857	15,227	15,619
Number of persons employed		143,657	152,477	153,542	156,002	162,321
Salaries and wages paid	$'000	309,204	350,388	356,558	384,794	426,368
Value of power, fuel, etc., used	„	15,187	16,547	16,864	18,117	19,678
Value of materials used	„	568,697	606,172	620,557	660,944	737,052
Value of production	„	494,412	548,985	577,335	618,385	708,321
Total value of output	„	1,078,296	1,171,704	1,214,757	1,297,446	1,465,050
Value of land and buildings	„	352,610	413,075	450,030	471,766	507,264
Value of plant and machinery	„	172,256	204,133	223,810	228,241	226,622
Horsepower of engines ordinarily in use		325,925	359,693	392,829	394,604	419,936

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

The table below includes government factories as well as those owned privately and by municipal authorities.

SHIP AND BOAT BUILDING AND REPAIRING, MARINE ENGINEERING AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		346	378	379	388	421
Number of persons employed		14,253	14,439	15,299	16,809	18,192
Salaries and wages paid	$'000	35,043	37,952	43,865	50,062	57,162
Value of power, fuel, etc., used	,,	901	949	1,092	1,116	1,386
Value of materials used	,,	31,645	28,169	31,446	50,523	68,951
Value of production	,,	40,272	44,640	52,237	64,364	77,001
Total value of output	,,	72,817	73,758	84,774	116,002	147,337
Value of land and buildings	,,	13,865	15,288	18,199	20,219	23,935
Value of plant and machinery	,,	11,745	13,324	15,914	17,641	19,465
Horsepower of engines ordinarily in use		81,291	82,891	86,120	88,067	89,848

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

AGRICULTURAL MACHINES AND IMPLEMENTS AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		556	615	671	725	764
Number of persons employed		13,818	15,582	15,069	15,280	15,759
Salaries and wages paid	$'000	33,117	39,347	37,316	41,867	44,923
Value of power, fuel, etc., used	,,	1,940	2,150	1,825	1,917	2,052
Value of materials used	,,	51,440	56,044	47,228	55,356	60,352
Value of production	,,	49,702	59,172	56,027	69,660	69,405
Total value of output	,,	103,082	117,366	105,080	126,934	131,808
Value of land and buildings	,,	23,064	26,783	29,071	30,533	33,328
Value of plant and machinery	,,	13,245	15,203	17,126	18,120	20,144
Horsepower of engines ordinarily in use		46,606	47,125	51,642	53,020	53,697

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

NON-FERROUS METALS—ROLLING AND EXTRUSION AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		30	26	28	30	32
Number of persons employed		6,983	7,420	7,362	7,773	7,564
Salaries and wages paid	$'000	20,293	22,318	23,322	25,583	26,680
Value of power, fuel, etc., used	,,	3,689	4,089	4,401	4,611	4,474
Value of materials used	,,	104,550	145,175	150,456	166,273	176,370
Value of production	,,	41,399	45,021	56,567	56,407	55,995
Total value of output	,,	149,637	194,285	211,424	227,291	236,839
Value of land and buildings	,,	21,531	24,035	24,468	25,278	25,837
Value of plant and machinery	,,	45,932	61,413	63,622	64,083	65,932
Horsepower of engines ordinarily in use		132,763	131,979	139,714	146,286	156,480

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

NON-FERROUS METALS—FOUNDING, CASTING, ETC.: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		461	473	482	479	479
Number of persons employed		11,180	12,264	12,070	12,276	12,302
Salaries and wages paid	$'000	25,389	30,175	30,189	32,268	35,061
Value of power, fuel, etc., used	"	2,100	2,363	2,234	2,395	2,525
Value of materials used	"	53,556	65,581	64,246	66,481	72,075
Value of production	"	49,276	58,727	57,231	63,389	67,702
Total value of output	"	104,932	126,671	123,710	132,266	142,302
Value of land and buildings	"	21,150	24,104	25,679	28,399	31,381
Value of plant and machinery	"	15,163	16,001	18,763	19,804	20,326
Horsepower of engines ordinarily in use		38,729	41,295	44,300	46,528	48,159

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

SHEET METAL WORKING, PRESSING AND STAMPING: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		1,181	1,232	1,254	1,270	1,296
Number of persons employed		29,551	31,444	32,962	33,243	33,918
Salaries and wages paid	$'000	66,877	76,289	83,550	89,026	96,512
Value of power, fuel, etc., used	"	3,718	4,040	4,281	4,398	4,783
Value of materials used	"	156,346	185,318	193,094	208,368	220,751
Value of production	"	123,360	139,261	148,347	165,125	181,081
Total value of output	"	283,425	328,619	345,722	377,891	406,615
Value of land and buildings	"	65,804	69,981	74,650	79,793	88,391
Value of plant and machinery	"	44,779	46,213	50,356	51,158	55,714
Horsepower of engines ordinarily in use		89,116	94,436	101,694	106,402	112,093

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

PIPES, TUBES AND FITTINGS—FERROUS: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		58	56	58	61	62
Number of persons employed		9,138	9,627	9,630	9,611	9,806
Salaries and wages paid	$'000	24,495	28,329	28,950	30,812	33,658
Value of power, fuel, etc., used	"	3,425	3,315	3,228	3,311	3,421
Value of materials used	"	60,047	71,829	67,589	75,073	81,325
Value of production	"	45,258	54,241	53,865	59,323	67,193
Total value of output	"	108,730	129,384	124,682	137,707	151,939
Value of land and buildings	"	17,921	17,697	18,330	19,209	20,062
Value of plant and machinery	"	22,330	21,114	20,851	22,152	28,918
Horsepower of engines ordinarily in use		60,447	67,991	67,410	76,522	82,332

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

WIRE AND WIRE WORKING (INCLUDING NAILS): AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		298	305	313	317	324
Number of persons employed		10,433	10,776	10,901	11,037	11,145
Salaries and wages paid	$'000	24,959	27,599	28,045	30,918	32,705
Value of power, fuel, etc., used	"	2,033	2,131	2,132	2,391	2,497
Value of materials used	"	92,097	102,344	95,994	107,952	109,224
Value of production	"	46,710	53,102	53,799	59,053	63,174
Total value of output	"	140,840	157,577	151,924	169,395	174,895
Value of land and buildings	"	21,743	24,365	28,858	31,744	33,446
Value of plant and machinery	"	15,770	17,384	20,634	22,619	26,519
Horsepower of engines ordinarily in use		42,624	44,154	51,303	52,789	56,365

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

WIRELESS AND AMPLIFYING APPARATUS: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		355	391	406	416	421
Number of persons employed . . .		16,907	18,359	17,683	18,167	18,534
Salaries and wages paid . .	$'000	35,772	40,265	39,812	43,351	46,286
Value of power, fuel, etc., used	„	1,321	1,355	1,388	1,470	1,560
Value of materials used . .	„	78,847	84,546	78,849	82,309	85,560
Value of production . .	„	56,834	63,333	65,150	69,183	74,411
Total value of output . .	„	137,002	149,233	145,387	152,962	161,532
Value of land and buildings .	„	23,883	25,865	28,000	32,159	31,963
Value of plant and machinery .	„	12,888	12,854	13,027	14,880	15,875
Horsepower of engines ordinarily in use .		14,720	15,316	16,038	16,825	17,240

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

The growing of cotton is treated in some detail in the chapter Rural Industry. The production of raw cotton is supplemented by imports from overseas, chiefly (in 1967–68) from the United States of America, Uganda, Mexico, Brazil, Pakistan, and Peru.

COTTON SPINNING AND WEAVING: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		85	80	78	70	68
Number of persons employed . . .		9,869	10,270	10,110	9,744	9,718
Salaries and wages paid . .	$'000	19,187	21,447	22,060	22,996	24,070
Value of power, fuel, etc., used .	„	2,549	2,545	2,622	2,604	2,733
Value of materials used	„	46,619	48,512	47,840	51,199	54,116
Value of production	„	38,193	42,554	43,401	47,193	45,989
Total value of output	„	87,362	93,611	93,863	100,996	102,838
Value of land and buildings . .	„	32,264	29,966	24,424	25,534	26,439
Value of plant and machinery . .	„	24,402	23,434	22,776	22,607	21,547
Horsepower of engines ordinarily in use .		43,752	42,422	42,007	42,370	43,360

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

WOOL CARDING, SPINNING AND WEAVING: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		129	131	124	118	120
Number of persons employed . . .		20,061	20,397	19,642	18,337	18,268
Salaries and wages paid . .	$'000	35,477	38,778	38,289	38,160	40,006
Value of power, fuel, etc., used .	„	2,873	2,942	2,995	2,930	3,032
Value of materials used	„	107,378	103,138	99,743	96,395	90,177
Value of production	„	55,799	59,103	57,684	62,704	64,344
Total value of output . .	„	166,051	165,183	160,422	162,029	157,553
Value of land and buildings .	„	23,326	24,210	25,654	25,583	26,160
Value of plant and machinery .	„	26,550	29,550	29,090	29,686	29,886
Horsepower of engines ordinarily in use .		71,318	71,180	68,341	70,686	70,848

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

HOSIERY AND OTHER KNITTED GOODS: AUSTRALIA(a), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		607	602	592	573	565
Number of persons employed . . .		25,471	25,593	25,559	25,043	25,500
Salaries and wages paid . .	$'000	42,834	46,267	48,343	51,172	54,604
Value of power, fuel, etc., used	„	1,691	1,753	1,829	1,945	2,164
Value of materials used . .	„	98,422	107,819	108,939	117,194	120,860
Value of production . .	„	83,674	91,207	93,348	98,155	101,660
Total value of output . .	„	183,788	200,778	204,115	217,294	224,684
Value of land and buildings .	„	32,685	34,218	37,029	38,319	40,936
Value of plant and machinery .	„	24,370	25,966	29,793	29,352	32,144
Horsepower of engines ordinarily in use .		24,344	25,344	26,872	27,130	28,291

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

RAYON, ACRYLICS AND OTHER SYNTHETIC FIBRES: AUSTRALIA(a), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		43	38	40	39	36
Number of persons employed . . .		4,527	4,104	4,562	4,843	4,810
Salaries and wages paid . .	$'000	9,825	9,212	10,329	12,139	12,166
Value of power, fuel, etc., used	„	1,236	1,192	1,338	1,408	1,550
Value of materials used . .	„	27,483	27,561	32,065	38,885	40,991
Value of production . .	„	18,191	19,161	20,957	21,769	26,610
Total value of output . .	„	46,910	47,914	54,359	62,062	69,151
Value of land and buildings .	„	8,711	7,854	8,737	9,651	10,205
Value of plant and machinery .	„	8,688	7,255	10,137	12,233	13,235
Horsepower of engines ordinarily in use .		14,279	25,981	27,861	18,884	19,028

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

ROPE AND CORDAGE: AUSTRALIA(a), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		25	25	25	25	26
Number of persons employed . . .		2,404	2,462	2,247	2,230	2,222
Salaries and wages paid . .	$'000	5,118	5,873	5,435	5,856	6,001
Value of power, fuel, etc., used	„	396	425	362	410	425
Value of materials used . .	„	11,911	13,409	10,510	11,371	10,578
Value of production . .	„	9,577	11,008	9,261	11,448	10,330
Total value of output . .	„	21,884	24,841	20,133	23,228	21,333
Value of land and buildings .	„	5,492	5,642	5,686	5,622	5,778
Value of plant and machinery .	„	3,600	3,885	3,916	3,602	3,676
Horsepower of engines ordinarily in use .		15,407	13,032	16,557	15,748	16,126

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

WOOLSCOURING AND FELLMONGERY: AUSTRALIA(a), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		54	56	53	51	47
Number of persons employed . . .		2,570	2,387	2,340	2,154	2,147
Salaries and wages paid . .	$'000	6,152	6,389	6,420	6,381	6,558
Value of power, fuel, etc., used	„	1,212	1,205	1,195	1,184	1,268
Value of materials used . .	„	35,621	31,404	28,789	27,761	23,858
Value of production . .	„	8,545	8,929	8,879	9,047	10,735
Total value of output . .	„	45,378	41,538	38,863	37,992	35,861
Value of land and buildings .	„	6,082	6,558	6,408	6,288	6,482
Value of plant and machinery .	„	2,993	3,383	3,110	3,393	3,272
Horsepower of engines ordinarily in use .		18,089	17,939	16,715	19,914	19,576

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

TANNING, CURRYING AND LEATHER DRESSING: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	1964–65	1965–66	1966–67	1967–68
Number of factories		102	102	102	96	97
Number of persons employed		4,298	4,277	4,012	3,721	3,657
Salaries and wages paid	$'000	9,910	10,828	10,242	10,015	10,055
Value of power, fuel, etc., used	„	1,021	1,045	988	948	976
Value of materials used	„	23,881	23,785	26,134	25,847	22,489
Value of production	„	17,165	16,576	16,323	16,127	16,550
Total value of output	„	42,066	41,407	43,445	42,922	40,016
Value of land and buildings	„	8,205	8,295	8,096	8,173	8,923
Value of plant and machinery	„	4,761	5,138	5,232	4,957	5,377
Horsepower of engines ordinarily in use		29,598	30,199	31,518	30,454	31,306

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

LEATHER GOODS (INCLUDING SADDLERY AND BELTING) AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	1964–65	1965–66	1966–67	1967–68
Number of factories		383	378	374	364	359
Number of persons employed		4,646	4,677	4,719	4,735	4,893
Salaries and wages paid	$'000	7,260	7,877	8,245	8,875	9,654
Value of power, fuel, etc., used	„	161	141	144	156	162
Value of materials used	„	14,083	15,190	16,277	16,957	17,422
Value of production	„	12,854	14,259	15,173	16,112	17,440
Total value of output	„	27,097	29,590	31,593	33,224	35,024
Value of land and buildings	„	7,238	7,934	9,146	9,181	9,694
Value of plant and machinery	„	1,572	1,542	1,741	1,846	2,076
Horsepower of engines ordinarily in use		3,716	3,001	3,635	4,412	4,525

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

TAILORING AND READY-MADE CLOTHING: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	1964–65	1965–66	1966–67	1967–68
Number of factories		1,892	1,879	1,805	1,670	1,640
Number of persons employed		34,188	35,092	35,529	34,213	33,519
Salaries and wages paid	$'000	51,126	55,926	58,884	61,132	63,385
Value of power, fuel, etc., used	„	1,059	1,089	1,104	1,073	1,110
Value of materials used	„	92,343	100,238	103,389	104,910	107,318
Value of production	„	86,803	95,711	102,855	105,515	110,113
Total value of output	„	180,206	197,037	207,348	211,498	218,541
Value of land and buildings	„	38,214	41,397	43,810	41,747	42,285
Value of plant and machinery	„	7,406	8,255	8,819	9,123	9,895
Horsepower of engines ordinarily in use		13,348	13,515	14,293	14,066	14,440

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

DRESSMAKING AND MILLINERY: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	1964–65	1965–66	1966–67	1967–68
Number of factories		1,124	1,146	1,181	1,281	1,298
Number of persons employed		14,930	15,041	15,618	17,626	18,100
Salaries and wages paid	$'000	21,188	22,577	24,387	29,788	32,079
Value of power, fuel, etc., used	„	439	447	486	596	636
Value of materials used	„	28,285	29,595	29,478	36,832	37,443
Value of production	„	34,240	36,771	38,837	48,786	53,220
Total value of output	„	62,964	66,812	68,801	86,214	91,300
Value of land and buildings	„	19,232	21,018	22,980	26,934	28,983
Value of plant and machinery	„	2,742	2,813	3,136	3,939	3,954
Horsepower of engines ordinarily in use		4,955	5,628	6,141	6,965	7,332

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

SHIRTS, COLLARS AND UNDERCLOTHING: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		329	337	333	334	330
Number of persons employed . . .		13,271	13,823	14,719	14,470	14,450
Salaries and wages paid . .	$'000	18,312	20,725	23,525	24,357	25,372
Value of power, fuel, etc., used	„	335	362	386	405	405
Value of materials used . .	„	34,453	35,748	35,780	38,841	38,542
Value of production . .	„	29,720	32,602	36,888	36,326	39,594
Total value of output . .	„	64,507	68,712	73,054	75,573	78,541
Value of land and buildings .	„	11,086	12,209	13,493	14,757	17,121
Value of plant and machinery .	„	2,942	3,469	3,818	4,124	5,284
Horsepower of engines ordinarily in use .		5,928	6,188	6,557	6,904	6,923

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

FOUNDATION GARMENTS: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		62	64	65	59	56
Number of persons employed . . .		3,948	4,176	4,492	4,553	4,753
Salaries and wages paid . .	$'000	5,616	6,457	6,969	7,824	8,687
Value of power, fuel, etc., used	„	104	105	112	112	124
Value of materials used . .	„	13,057	14,658	15,739	17,814	17,914
Value of production . .	„	12,428	13,994	14,909	16,354	18,751
Total value of output . .	„	25,589	28,757	30,760	34,280	36,788
Value of land and buildings .	„	4,918	5,411	5,227	5,311	5,887
Value of plant and machinery .	„	1,414	1,665	1,762	1,634	1,794
Horsepower of engines ordinarily in use .		2,082	2,353	2,336	2,652	2,752

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

The table below refers to boot and shoe factories as distinct from those devoted to repairing. Factories engaged in the manufacture of sand-shoes, goloshes and gum, etc., boots of rubber are not included here, but are classified under Rubber Goods, *see* page 1094.

BOOTS AND SHOES: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		393	398	394	386	368
Number of persons employed . . .		21,030	20,779	20,072	20,009	19,659
Salaries and wages paid . .	$'000	36,459	38,372	37,507	40,055	41,013
Value of power, fuel, etc., used	„	686	724	743	798	803
Value of materials used . .	„	63,347	63,931	60,849	66,629	68,102
Value of production . .	„	58,342	58,738	61,523	66,104	68,024
Total value of output . .	„	122,375	123,393	123,114	133,532	136,929
Value of land and buildings .	„	16,243	17,057	18,229	19,261	19,178
Value of plant and machinery .	„	16,077	18,805	19,258	20,619	21,428
Horsepower of engines ordinarily in use .		15,594	15,394	16,117	15,658	15,533

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

FLOUR-MILLING: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		114	108	107	102	99
Number of persons employed		4,512	4,253	4,152	3,861	3,911
Salaries and wages paid	$'000	10,560	10,736	10,934	10,977	11,539
Value of power, fuel, etc., used	"	2,028	1,964	1,880	1,865	1,954
Value of materials used	"	132,713	124,974	122,433	122,294	131,277
Value of production	"	27,962	29,210	30,184	31,122	34,237
Total value of output	"	162,703	156,148	154,497	155,281	167,468
Value of land and buildings	"	18,024	17,615	18,272	17,964	18,256
Value of plant and machinery	"	13,065	13,069	13,506	13,294	13,315
Horsepower of engines ordinarily in use		54,256	54,450	56,970	51,638	52,175

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

OTHER GRAIN MILLS(*a*): AUSTRALIA(*b*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		254	271	269	283	290
Number of persons employed		5,322	5,774	5,979	6,302	6,737
Salaries and wages paid	$'000	11,495	13,116	14,586	16,823	18,806
Value of power, fuel, etc., used	"	2,227	2,383	2,609	2,950	3,418
Value of materials used	"	77,154	93,800	106,972	113,289	132,521
Value of production	"	35,718	41,504	45,401	48,239	55,259
Total value of output	"	115,100	137,687	154,983	164,478	191,197
Value of land and buildings	"	15,464	16,885	18,694	21,220	25,189
Value of plant and machinery	"	15,378	17,772	18,400	22,039	26,749
Horsepower of engines ordinarily in use		53,849	59,279	63,492	70,603	78,594

(*a*) Excludes corn crushing mills. (*b*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

The table below contains information regarding establishments in which the manufacture of bread, cakes, etc. was carried on. Since the details refer only to establishments coming within the definition of a factory as explained at the beginning of this chapter, the table does not give complete details of the industry, as a large number of bakeries, etc. not coming within the definition are excluded.

BAKERIES (INCLUDING CAKES AND PASTRY): AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		3,689	3,681	3,580	3,481	3,376
Number of persons employed		21,627	22,447	22,950	23,346	23,489
Salaries and wages paid	$'000	36,163	40,162	42,875	47,010	49,878
Value of power, fuel, etc., used	"	5,636	5,904	6,075	6,168	6,417
Value of materials used	"	104,820	113,476	118,707	121,347	126,238
Value of production	"	86,550	93,901	108,346	112,837	117,288
Total value of output	"	197,005	213,280	233,128	240,353	249,944
Value of land and buildings	"	61,898	67,902	71,946	75,378	82,345
Value of plant and machinery	"	37,903	40,277	40,473	39,788	43,347
Horsepower of engines ordinarily in use		40,175	43,209	44,947	45,615	48,641

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

BISCUITS: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		53	53	56	55	57
Number of persons employed		6,262	6,474	6,716	6,843	6,761
Salaries and wages paid	$'000	11,696	13,159	13,677	15,107	15,338
Value of power, fuel, etc., used	,,	1,171	1,242	1,317	1,377	1,454
Value of materials used	,,	27,483	29,714	32,546	35,072	36,528
Value of production	,,	21,628	24,910	26,368	26,955	30,069
Total value of output	,,	50,281	55,867	60,231	63,404	68,052
Value of land and buildings	,,	11,278	12,926	14,404	14,410	16,023
Value of plant and machinery	,,	8,868	8,422	10,180	10,850	12,561
Horsepower of engines ordinarily in use		16,381	16,791	17,395	18,831	19,492

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

Sugar-cane is grown in New South Wales and Queensland, and particulars of area, yield, etc., are given in detail in the chapter Rural Industry. The products of the sugar-mills are raw sugar and molasses, the former being sent to the refineries in different parts of Australia for further treatment. In 1967–68 there were two sugar refineries in Queensland and one in each of New South Wales, Victoria, South Australia, and Western Australia.

SUGAR MILLS: NEW SOUTH WALES AND QUEENSLAND, 1963-64 TO 1967-68

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
New South Wales—					
Number of factories	3	3	3	3	3
Number of persons employed	247	283	328	330	363
Queensland—					
Number of factories	31	31	31	31	31
Number of persons employed	6,981	7,924	7,008	6,758	6,834

CONFECTIONERY: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		189	187	180	175	172
Number of persons employed		8,156	8,301	8,590	8,663	8,544
Salaries and wages paid	$'000	15,185	16,685	18,037	19,371	20,448
Value of power, fuel, etc., used	,,	1,596	1,613	1,653	1,719	1,795
Value of materials used	,,	49,470	53,864	53,414	60,573	61,475
Value of production	,,	32,371	33,984	38,303	39,779	40,786
Total value of output	,,	83,437	89,461	93,371	102,071	104,055
Value of land and buildings	,,	17,459	18,334	20,232	22,369	27,383
Value of plant and machinery	,,	17,780	19,095	19,776	21,085	25,692
Horsepower of engines ordinarily in use		43,165	41,806	43,790	48,076	49,855

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

JAM, FRUIT AND VEGETABLE CANNING, PICKLES, SAUCES, VINEGAR AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		167	161	160	156	157
Number of persons employed		12,397	12,672	13,573	13,473	13,016
Salaries and wages paid	$'000	25,961	29,281	31,989	35,202	35,248
Value of power, fuel, etc., used	,,	2,609	2,868	3,167	3,329	3,297
Value of materials used	,,	103,551	116,182	134,813	141,964	144,174
Value of production	,,	60,924	66,754	74,873	80,787	74,071
Total value of output	,,	167,084	185,805	212,852	226,080	221,541
Value of land and buildings	,,	32,105	34,415	39,166	42,181	42,647
Value of plant and machinery	,,	30,011	33,473	40,649	43,552	47,721
Horsepower of engines ordinarily in use		53,024	54,139	59,306	63,006	64,032

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

Bacon and ham and other pig products are dealt with more fully in the chapter Rural Industry.

BACON-CURING: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		85	79	81	76	75
Number of persons employed		4,865	5,098	5,419	5,569	5,370
Salaries and wages paid	$'000	9,924	11,101	12,371	13,440	13,662
Value of power, fuel, etc., used	,,	1,113	1,151	1,198	1,370	1,318
Value of materials used	,,	67,841	74,997	80,060	85,356	90,777
Value of production	,,	19,155	22,982	29,124	30,747	28,910
Total value of output	,,	88,109	99,129	110,381	117,472	121,005
Value of land and buildings	,,	8,750	8,997	9,894	10,415	10,487
Value of plant and machinery	,,	5,919	6,190	6,951	7,752	7,682
Horsepower of engines ordinarily in use		18,152	18,396	20,141	20,640	20,803

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

The butter, cheese and condensed milk industries are dealt with more fully in the chapter Rural Industry.

BUTTER, CHEESE AND CONDENSED AND PROCESSED MILK AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		347	344	337	328	315
Number of persons employed		11,510	11,505	11,454	11,650	11,273
Salaries and wages paid	$'000	26,314	27,680	28,810	31,445	32,586
Value of power, fuel, etc., used	,,	6,138	6,364	6,500	6,988	7,185
Value of materials used	,,	244,587	261,066	262,480	286,631	264,775
Value of production	,,	59,236	65,028	67,970	68,535	65,262
Total value of output	,,	309,961	332,458	336,949	362,154	337,222
Value of land and buildings	,,	31,534	34,544	38,681	42,699	43,988
Value of plant and machinery	,,	39,361	40,445	46,398	52,842	53,236
Horsepower of engines ordinarily in use		120,084	120,208	127,837	133,449	126,676

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

The following industries are engaged chiefly in the freezing and preserving of meat. Most abattoirs are excluded, except in Queensland and Western Australia. Works have been established at the seaports for the purpose of handling beef, lamb and mutton for export, and insulated space for the carriage of chilled and frozen produce is provided by shipping companies trading between Australia and other parts of the world. In recent years there has been considerable expansion in the canning of meat and fish. Particulars of the quantities and values of beef, mutton and lamb preserved by cold process exported from Australia over a series of years will be found in the chapter Rural Industries.

MEAT AND FISH PRESERVING: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		164	173	175	223	240
Number of persons employed . . .		10,161	10,225	10,659	11,333	12,357
Salaries and wages paid . .	$'000	22,923	24,993	26,916	30,137	33,396
Value of power, fuel, etc., used	,,	3,147	3,318	3,527	3,509	3,919
Value of materials used . .	,,	158,668	178,508	200,506	206,986	237,485
Value of production . .	,,	43,539	46,456	55,209	63,630	71,044
Total value of output . .	,,	205,353	228,283	259,243	274,125	312,448
Value of land and buildings .	,,	21,013	26,840	28,050	32,329	35,831
Value of plant and machinery .	,,	15,162	19,587	21,633	24,772	28,270
Horsepower of engines ordinarily in use .		56,424	54,214	60,346	66,267	79,100

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

CONDIMENTS, COFFEE, SPICES: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		238	239	237	241	238
Number of persons employed . . .		5,218	5,166	5,431	5,422	5,306
Salaries and wages paid . .	$'000	9,975	9,983	11,669	12,650	13,038
Value of power, fuel, etc., used	,,	743	754	867	943	935
Value of materials used . .	,,	45,737	48,805	54,706	56,146	56,844
Value of production . .	,,	27,506	29,459	33,534	40,284	43,624
Total value of output . .	,,	73,986	79,018	89,108	97,372	101,403
Value of land and buildings .	,,	18,766	21,091	23,165	24,299	23,321
Value of plant and machinery .	,,	7,956	10,099	11,827	12,773	12,061
Horsepower of engines ordinarily in use .		17,088	18,590	19,500	19,355	19,697

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

BREWERIES: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		24	26	26	25	25
Number of persons employed . . .		5,744	5,885	5,943	5,928	6,063
Salaries and wages paid . .	$'000	14,753	15,946	16,997	18,572	20,949
Value of power, fuel, etc., used	,,	3,140	3,160	3,365	3,503	3,798
Value of materials used . .	,,	59,967	64,746	65,255	70,760	79,634
Value of production . .	,,	48,355	51,878	53,509	57,020	63,451
Total value of output(*b*) . .	,,	111,463	119,784	122,130	131,282	146,883
Value of land and buildings .	,,	30,121	31,363	32,400	36,385	38,073
Value of plant and machinery .	,,	30,733	32,442	33,129	36,204	38,167
Horsepower of engines ordinarily in use .		53,765	56,549	62,045	63,275	66,846

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory. (*b*) Excludes excise duty.

AERATED WATERS AND CORDIALS: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		509	503	495	492	482
Number of persons employed . . .		5,193	5,303	5,717	5,982	6,122
Salaries and wages paid . .	$'000	9,434	10,415	11,940	13,365	14,424
Value of power, fuel, etc., used	„	936	1,020	1,062	1,161	1,281
Value of materials used . .	„	30,985	35,693	41,257	45,898	58,233
Value of production . .	„	27,473	31,758	33,305	37,646	45,789
Total value of output . .	„	59,395	68,471	75,624	84,705	105,303
Value of land and buildings .	„	19,027	19,770	20,473	21,927	23,358
Value of plant and machinery .	„	12,688	13,031	14,152	15,685	17,014
Horsepower of engines ordinarily in use .		17,610	18,713	20,190	21,821	22,281

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

WINERIES AND DISTILLERIES: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		169	170	177	178	178
Number of persons employed . . .		2,204	2,344	2,408	2,488	2,665
Salaries and wages paid . .	$'000	4,458	5,057	5,587	6,089	6,729
Value of power, fuel, etc., used	„	798	907	893	937	988
Value of materials used . .	„	21,431	23,988	23,377	27,988	30,560
Value of production . .	„	11,874	15,815	15,137	19,741	21,521
Total value of output . .	„	34,103	40,711	39,408	48,666	53,069
Value of land and buildings .	„	7,285	8,015	8,956	9,385	10,258
Value of plant and machinery .	„	7,789	8,370	8,832	9,648	11,067
Horsepower of engines ordinarily in use .		17,942	18,807	19,265	19,667	20,443

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

TOBACCO, CIGARS AND CIGARETTES: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		15	15	16	15	13
Number of persons employed . . .		4,498	4,670	4,843	4,659	4,716
Salaries and wages paid . .	$'000	10,898	11,513	11,878	12,801	13,536
Value of power, fuel, etc., used	„	508	547	615	688	736
Value of materials used . .	„	78,380	81,280	77,434	81,318	83,513
Value of production . .	„	45,233	52,482	57,426	66,070	75,623
Total value of output(*b*) . .	„	124,122	134,308	135,474	148,075	159,871
Value of land and buildings .	„	10,003	10,424	12,448	13,299	12,415
Value of plant and machinery .	„	13,784	14,104	15,231	17,205	15,960
Horsepower of engines ordinarily in use .		11,955	12,596	13,188	14,418	14,150

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory. (*b*) Excludes excise duty.

ICE-CREAM: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		53	54	56	56	57
Number of persons employed . . .		2,518	2,639	2,687	2,847	2,869
Salaries and wages paid . .	$'000	5,429	6,019	6,587	6,973	7,523
Value of power, fuel, etc., used	„	1,040	1,106	1,214	1,303	1,385
Value of materials used . .	„	17,097	19,301	23,510	26,647	28,850
Value of production . .	„	13,903	15,636	16,790	16,098	17,906
Total value of output . .	„	32,040	36,043	41,514	44,048	48,141
Value of land and buildings .	„	11,297	13,486	13,993	14,090	14,880
Value of plant and machinery .	„	15,260	12,702	12,722	13,545	13,177
Horsepower of engines ordinarily in use .		20,562	21,415	24,360	26,287	26,604

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

Sawmilling is the most important industry in Class 10. Because of difficulties associated with the classifying of sawmills into forest and town mills, they have been combined in the following table, together with plywood and veneer mills. The figures exclude particulars of a small number of itinerant and travelling sawmills.

SAWMILLS AND PLYWOOD AND VENEER MILLS AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		2,421	2,353	2,335	2,288	2,242
Number of persons employed . . .		32,202	32,271	33,104	32,147	31,793
Salaries and wages paid . .	$'000	63,119	67,479	71,910	74,196	77,054
Value of power, fuel, etc., used	„	5,325	5,552	5,658	5,742	5,931
Value of materials used . .	„	156,464	166,841	169,627	174,595	182,307
Value of production . .	„	115,903	128,319	133,222	135,576	140,591
Total value of output . .	„	277,692	300,713	308,507	315,913	328,828
Value of land and buildings .	„	39,004	40,967	45,254	46,921	48,695
Value of plant and machinery .	„	40,111	41,964	44,677	46,099	46,202
Horsepower of engines ordinarily in use .		437,807	433,626	453,625	464,782	470,496

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

JOINERY: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		2,239	2,320	2,329	2,381	2,374
Number of persons employed . . .		17,594	18,597	18,954	19,130	19,451
Salaries and wages paid . .	$'000	36,705	40,956	43,172	46,462	49,952
Value of power, fuel, etc., used	„	969	1,062	1,089	1,132	1,207
Value of materials used . .	„	70,156	78,939	81,768	87,660	93,354
Value of production . .	„	59,291	67,506	69,344	76,939	82,629
Total value of output . .	„	130,416	147,507	152,201	165,730	177,190
Value of land and buildings .	„	32,757	37,356	40,473	44,661	48,898
Value of plant and machinery .	„	10,811	11,352	12,036	12,936	13,333
Horsepower of engines ordinarily in use .		89,578	93,636	96,683	100,239	102,002

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

CABINET AND FURNITURE MAKING AND UPHOLSTERY AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		1,638	1,639	1,624	1,641	1,662
Number of persons employed . . .		15,948	16,361	16,630	16,932	17,396
Salaries and wages paid . .	$'000	30,874	34,047	36,254	38,683	42,286
Value of power, fuel, etc., used	„	830	869	914	943	1,027
Value of materials used . .	„	61,061	67,330	67,146	69,338	75,927
Value of production . .	„	52,312	58,816	63,298	68,418	73,257
Total value of output . .	„	114,204	127,014	131,359	138,700	150,211
Value of land and buildings .	„	30,906	34,730	37,032	40,257	44,502
Value of plant and machinery .	„	7,716	8,029	8,839	9,335	9,590
Horsepower of engines ordinarily in use .		46,599	47,136	52,932	55,079	56,546

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

These following industries constitute the principal manufactures in Class 11. The establishments covered in the tables following include those engaged in the lithographic printing, bookbinding, paper ruling, and linotyping, and Government printing works.

NEWSPAPERS AND PERIODICALS: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		411	413	407	408	402
Number of persons employed		16,052	17,287	17,476	17,734	17,901
Salaries and wages paid	$'000	40,225	46,120	48,516	53,366	57,618
Value of power, fuel, etc., used	,,	1,481	1,587	1,646	1,784	1,927
Value of materials used	,,	61,446	66,240	67,181	70,189	75,190
Value of production	,,	74,132	83,292	88,401	99,270	106,604
Total value of output	,,	137,059	151,119	157,228	171,242	183,721
Value of land and buildings	,,	39,053	42,958	45,093	46,506	53,857
Value of plant and machinery	,,	37,403	42,588	44,263	46,996	50,333
Horsepower of engines ordinarily in use		44,029	48,021	49,985	53,053	53,764

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

GOVERNMENT AND GENERAL PRINTING WORKS AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		1,780	1,875	1,904	1,960	1,986
Number of persons employed		31,637	33,222	34,747	34,988	35,536
Salaries and wages paid	$'000	69,623	78,133	85,444	90,418	97,018
Value of power, fuel, etc., used	,,	2,227	2,504	2,761	2,821	2,969
Value of materials used	,,	89,280	98,703	105,269	108,008	116,436
Value of production	,,	124,881	138,981	153,535	162,365	177,359
Total value of output	,,	216,388	240,188	261,564	273,195	296,763
Value of land and buildings	,,	67,550	79,610	84,829	89,279	97,117
Value of plant and machinery	,,	54,510	60,855	65,295	66,415	68,364
Horsepower of engines ordinarily in use		54,491	58,731	61,942	62,427	65,455

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

MANUFACTURED STATIONERY: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		148	142	144	147	148
Number of persons employed		5,563	5,870	6,134	6,279	6,327
Salaries and wages paid	$'000	11,746	13,077	14,445	15,470	16,410
Value of power, fuel, etc., used	,,	524	560	561	603	642
Value of materials used	,,	37,028	39,299	41,283	43,888	46,260
Value of production	,,	30,272	34,597	38,655	41,841	46,478
Total value of output	,,	67,824	74,457	80,499	86,332	93,381
Value of land and buildings	,,	14,645	15,496	17,384	17,865	20,223
Value of plant and machinery	,,	10,774	10,706	12,261	13,217	14,766
Horsepower of engines ordinarily in use		11,955	12,625	13,554	13,962	14,392

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

CARDBOARD BOXES, CARTONS AND CONTAINERS, AND PAPER BAGS AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		254	250	252	259	266
Number of persons employed		11,501	12,158	12,839	13,696	14,312
Salaries and wages paid	$'000	24,543	28,027	30,121	34,343	37,880
Value of power, fuel, etc., used	,,	1,045	1,191	1,266	1,447	1,625
Value of materials used	,,	87,003	97,553	104,210	116,952	128,713
Value of production	,,	53,695	60,615	64,843	75,154	83,261
Total value of output	,,	141,743	159,359	170,319	193,553	213,598
Value of land and buildings	,,	30,764	38,002	41,304	46,573	49,123
Value of plant and machinery	,,	26,268	29,899	32,100	35,072	37,934
Horsepower of engines ordinarily in use		28,154	31,661	34,834	39,343	42,995

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

Although the paper manufacturing industry has been established in Australia for many years, it was not until the manufacture of paper pulp from indigenous timber in 1938–39 that any marked development occurred. The number of factories operating in 1967–68 comprised three in New South Wales, nine in Victoria, two in Queensland, two in South Australia, one in Western Australia, and four in Tasmania. In Tasmania, newsprint, writing and printing papers are mainly produced, and in the other States, wrappings, other papers and boards. Mills producing pulp from eucalypt timber are operating in Victoria and Tasmania, while in South Australia pulp is being produced from locally-grown softwoods.

PAPER MAKING(*a*): AUSTRALIA(*b*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		26	25	25	23	21
Number of persons employed		9,205	9,411	9,782	10,087	9,920
Salaries and wages paid	$'000	28,011	31,000	32,780	36,293	37,372
Value of power, fuel, etc., used	,,	9,944	10,763	11,589	13,115	13,573
Value of materials used	,,	66,555	76,704	81,786	87,647	90,888
Value of production	,,	66,195	74,466	75,050	80,351	88,823
Total value of output	,,	142,695	161,932	168,425	181,114	193,283
Value of land and buildings	,,	34,310	35,915	44,985	46,286	48,764
Value of plant and machinery	,,	73,352	78,842	92,452	105,982	117,020
Horsepower of engines ordinarily in use		256,769	270,526	286,522	298,765	299,646

(*a*) Includes pulp mills. (*b*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

RUBBER GOODS: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		119	120	125	125	123
Number of persons employed		16,944	17,414	17,071	16,837	17,677
Salaries and wages paid	$'000	41,181	46,199	46,082	47,942	53,569
Value of power, fuel, etc., used	,,	5,354	5,419	5,563	5,787	6,103
Value of materials used	,,	93,452	101,143	99,857	99,824	107,086
Value of production	,,	67,037	69,095	70,289	76,052	88,725
Total value of output	,,	165,843	175,658	175,709	181,662	201,914
Value of land and buildings	,,	32,160	33,002	38,682	43,939	44,240
Value of plant and machinery	,,	30,688	34,864	47,304	53,293	52,917
Horsepower of engines ordinarily in use		151,918	163,700	181,284	197,188	196,794

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

TYRE RETREADING AND REPAIRING: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		555	585	586	560	525
Number of persons employed		3,317	3,399	3,345	3,361	3,434
Salaries and wages paid	$'000	6,823	7,412	7,856	8,249	9,032
Value of power, fuel, etc., used	,,	930	967	988	1,051	1,070
Value of materials used	,,	15,903	18,107	18,579	19,995	20,941
Value of production	,,	18,667	19,961	19,919	23,417	24,521
Total value of output	,,	35,500	39,035	39,485	44,464	46,532
Value of land and buildings	,,	18,434	19,319	20,114	20,332	19,861
Value of plant and machinery	,,	5,844	6,344	6,890	6,988	6,848
Horsepower of engines ordinarily in use		14,406	15,681	16,191	17,876	17,229

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

PLASTIC MOULDING AND PRODUCTS: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		440	485	505	541	571
Number of persons employed . . .		12,668	14,157	14,517	15,833	17,067
Salaries and wages paid . .	$'000	27,905	33,770	35,426	41,371	47,667
Value of power, fuel, etc., used	„	2,530	2,985	3,170	3,755	4,205
Value of materials used . .	„	63,489	75,722	76,957	91,691	110,621
Value of production . .	„	57,641	66,818	68,464	84,248	93,890
Total value of output . .	„	123,660	145,526	148,591	179,694	208,715
Value of land and buildings .	„	25,485	29,954	34,174	40,870	44,939
Value of plant and machinery .	„	28,965	32,843	36,559	40,451	45,477
Horsepower of engines ordinarily in use .		58,759	66,918	75,451	85,077	91,582

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

Further information on the following subject is also shown in the chapter Electric Power Generation and Distribution.

Particulars of the types of engines and generators installed in electric light and power works and their rated horse-power are given on page 1058.

ELECTRIC LIGHT AND POWER WORKS: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		269	258	253	244	252
Number of persons employed . . .		12,162	12,457	12,600	13,085	12,999
Salaries and wages paid . .	$'000	33,235	36,283	38,879	41,352	43,713
Value of power, fuel, etc., used	„	85,708	88,590	94,151	98,169	101,965
Value of materials used . .	„	11,492	16,139	17,348	20,176	21,149
Value of production . .	„	194,019	206,233	220,237	237,385	263,018
Total value of output . .	„	291,219	310,962	331,736	355,731	386,132
Value of land and buildings .	„	497,126	537,430	583,694	638,486	657,633
Value of plant and machinery .	„	622,087	652,376	711,382	879,465	891,402
Generators installed—kilowatt capacity '000 kW		7,983	8,498	9,396	11,051	12,153

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

GAS WORKS: AUSTRALIA(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories		87	89	87	86	83
Number of persons employed . . .		3,449	3,272	3,055	2,991	2,805
Salaries and wages paid . .	$'000	9,157	9,200	9,325	9,694	9,644
Value of power, fuel, etc., used	„	5,627	5,538	5,186	5,191	5,455
Value of materials used . .	„	26,586	26,708	27,349	26,688	27,041
Value of production . .	„	33,289	35,018	34,089	35,686	35,367
Total value of output . .	„	65,502	67,263	66,624	67,566	67,863
Value of land and buildings .	„	15,327	16,134	16,393	16,053	15,829
Value of plant and machinery .	„	60,559	63,697	65,864	65,089	62,130
Horsepower of engines ordinarily in use .		56,803	58,702	59,127	63,103	62,236

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

CHAPTER 27

ELECTRIC POWER GENERATION AND DISTRIBUTION

This chapter is divided into three major parts: the Introduction, which deals briefly with the resources, generation and distribution, and future development of electric power in Australia; the Snowy Mountains Hydro-electric Scheme; and the origins, development, present situation and new projects of electrical systems in each Australian State and Territory.

The information contained in the chapter relates to situations existing and projects contemplated in December 1968, and may be considerably affected by changes in policy or plans, or by developments in the projects themselves. Greater descriptive and historical detail about the various systems is contained in earlier issues of the Year Book.

INTRODUCTION

Distribution of population and location of power resources in Australia

The two principal centres of population and industry in Australia, the metropolitan areas of Sydney and Melbourne, make the greatest demands for electric power, and their growth has been associated with the development of large deposits of coal located relatively close to the source of demand. This, together with the fact that the major water resources are also located in the south-eastern portion of Australia, materially influences the distribution of industrial population and the location of major electric power stations. By far the most important source of energy used in the production of electric power in Australia is coal. At 30 June 1968 thermal power equipment represented 71 per cent, hydro plant 26 per cent, and internal combustion equipment 2.5 per cent of the total installed generating capacity.

Most of Australia is poorly supplied with water, only about 13 per cent receiving an annual rainfall of 30 inches or over, and these areas are confined largely to Tasmania and to the narrow coastal strip along the east coast of the mainland. The only region on the mainland of Australia high enough to receive reliable winter snowfall, and from which, therefore, reasonably constant water supplies throughout the year can be expected, is the mountain chain which stretches from the high plateaux of south-eastern New South Wales to the north-eastern highlands of Victoria. The hydro-electric potential of this area is considerable, and plans have been formulated to develop more than 4,000,000 kW by 1975. The two major construction projects in this area are the Snowy Mountains and Kiewa schemes. Other hydro-electric potential does exist on the mainland on the rivers of the coastal areas of New South Wales and Queensland, but the amount available is smaller than the potential of the Alpine region. In Tasmania, hydro-electric resources have been estimated at about 50 per cent of the total Australian hydro-electric potential. On the mainland the chief source of energy is coal; in Tasmania it is water.

Electric power generation and distribution

At the beginning of this century Australia's electrical undertakings were carried on mainly by private enterprise, but with some measure of governmental control designed to provide standards of safety and to define the scope and obligations of the private organisations. A trend towards public ownership commenced during the 1914–18 War and became more pronounced after the 1939–45 War. By 1961 all major generating stations supplying the public were, in varying degrees, under the control of statutory organisations constituted with the object of unifying and co-ordinating the generation and distribution of electricity supplies, There are still a large number of small private and municipal enterprises generating power for supply to country towns, although central authorities are extending supply to these places wherever practicable. In many areas it has been, and remains, the practice for central authorities to sell power in bulk to local distributing organisations which undertake reticulation.

In addition to the private, local government and statutory organisations which generate and or distribute electricity for sale, numerous firms generate power for use in their own establishments, particularly those engaged in mining pursuits remote from the main centres of population. This chapter, however, is concerned mainly with the activities of central electric stations, as the power regularly produced for such internal consumption is, in any case, a relatively small proportion of the total power produced. The measures taken by authorities to satisfy the demand created by the post-war growth in population and building and by developments in industry and commerce are described in the following pages.

SNOWY MOUNTAINS HYDRO-ELECTRIC SCHEME*

Snowy Mountains Hydro-electric Power Act 1949

In July 1949 the Commonwealth Government established the Snowy Mountains Hydro-electric Authority, and empowered it to generate electricity by means of hydro-electric works in the Snowy Mountains Area; supply electricity to the Commonwealth (i) for defence purposes, (ii) for consumption in the Australian Capital Territory; and supply to a State, or to a State Authority, electricity not required for defence purposes or for consumption in the Australian Capital Territory.

The Snowy Mountains Act is supported by a detailed agreement between the States of New South Wales and Victoria and the Commonwealth with regard to the construction and operation of the Scheme, the distribution of power and water, charges to be made for electricity, and other such matters. The Snowy Mountains Council, established under the terms of the Agreement and consisting of representatives of the Commonwealth, the Authority and the two States, directs and controls the operation and maintenance of the permanent works of the Authority and the allocation of loads to generating stations.

Snowy Mountains Hydro-electric Scheme

The broad basis of the Snowy scheme is to transfer waters, which would otherwise flow to the sea unharnessed, from the Snowy River and its tributaries to the inland system, so that the water may be used for irrigation and to provide power. It involves two main diversions, the diversion of the Eucumbene, a tributary of the Snowy, to the Upper Tumut River, and the diversion of the main stream of the Snowy River at Island Bend and Jindabyne to the Swampy Plain River. These two diversions divide the scheme geographically into two sections, the Snowy–Tumut Development and the Snowy–Murray Development (*see* plate 53 opposite). For purposes of both power production and irrigation it is necessary to regulate run-off, and this is achieved by the use of Lake Eucumbene (formed by the construction of Eucumbene Dam) and other smaller storages to control the waters of the Eucumbene, Murrumbidgee, Tooma, and Tumut Rivers of the Snowy–Tumut Development and of the Snowy and Geehi Rivers for the Snowy–Murray Development. A sectional diagram of the scheme appears on plate 54, page 1100.

Snowy–Tumut Development. This development comprises works for the diversion and regulation of the waters of the Eucumbene, Upper Tooma, Upper Murrumbidgee, and Upper Tumut Rivers and their combined development through a series of power stations down the Tumut River. A major dam has been constructed on the Eucumbene River to create Lake Eucumbene, which has an ultimate usable storage of 3.5 million acre feet. The waters of the Upper Murrumbidgee River are diverted into Lake Eucumbene by a dam at Tantangara and a 10½-mile tunnel from Tantangara Reservoir. From Lake Eucumbene the water flows through a 14-mile tunnel to Tumut Pond Reservoir on the upper reaches of the Tumut River, where it joins the waters of the Tumut River itself and the waters of the Tooma River diverted to Tumut Pond Reservoir by a diversion dam and a 9-mile tunnel.

From Tumut Pond Reservoir water is conveyed by pressure tunnel to Tumut 1 underground Power Station (capacity 320,000 kW), returned to the Tumut River and then by another pressure tunnel to Tumut 2 underground Power Station (capacity 280,000 kW), thence discharging into Talbingo Reservoir, also on the Tumut River.

Tumut 3 Power Station, the largest station of the scheme (generating capacity 1,500,000 kW and pumping capacity 10,500 cubic feet per second) is being constructed below Talbingo Reservoir and will discharge into Jounama Pondage on the Tumut River. This pondage will provide a downstream pumping pool and also re-regulate discharges from Tumut 3 Power Station as required. Releases from Jounama Pondage will then enter Blowering Reservoir formed by Blowering Dam. This dam, constructed by the Snowy Mountains Authority as an agent for the State of New South Wales, provides for the regulation of power station discharges for irrigation use in the Murrumbidgee Valley. The Authority is constructing a power station at the foot of the dam to generate power from releases of water for irrigation purposes.

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* *See also* the chapter Water Conservation and Irrigation of this issue and special detailed article in Year Book No. 42, pp. 1103–30.

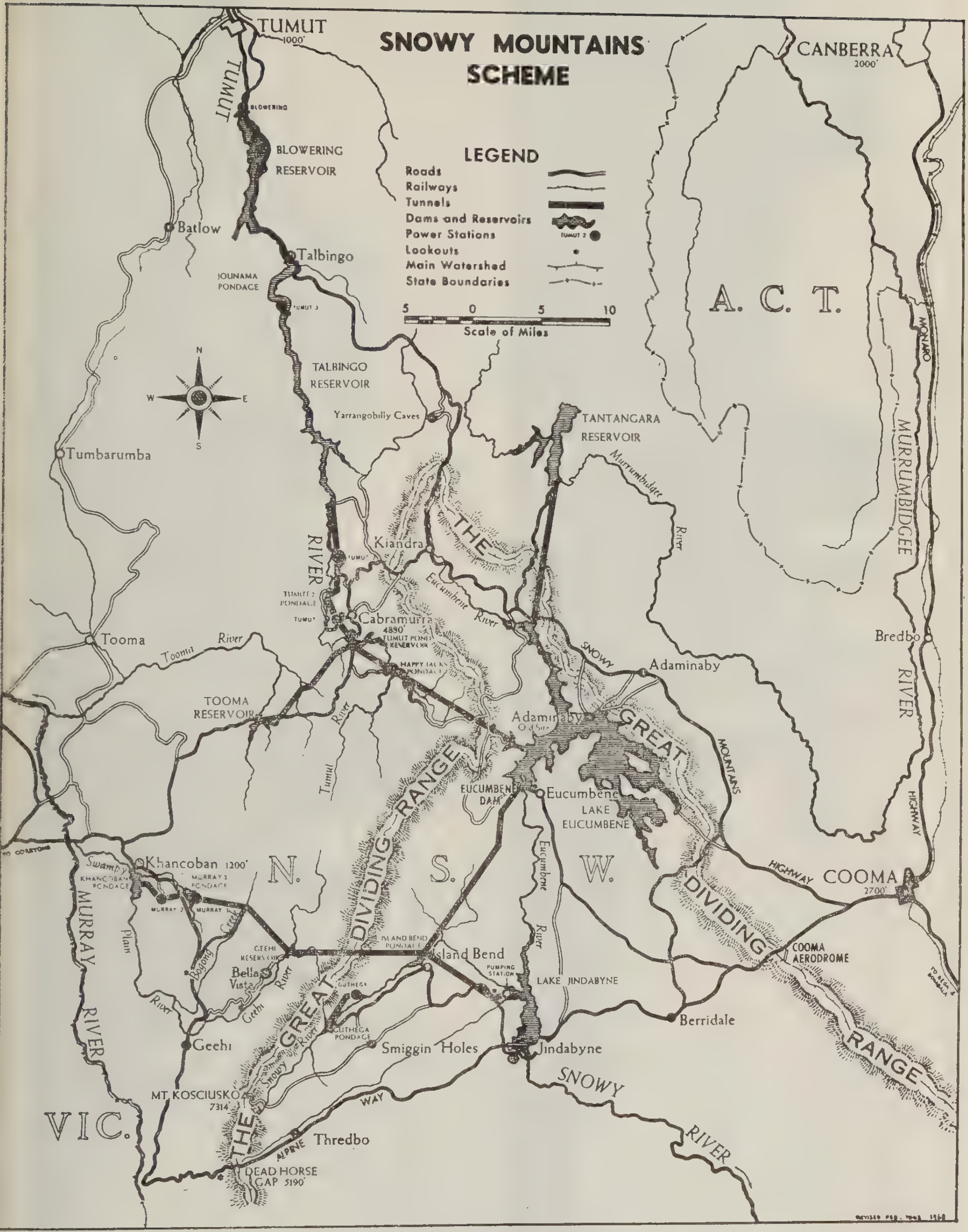
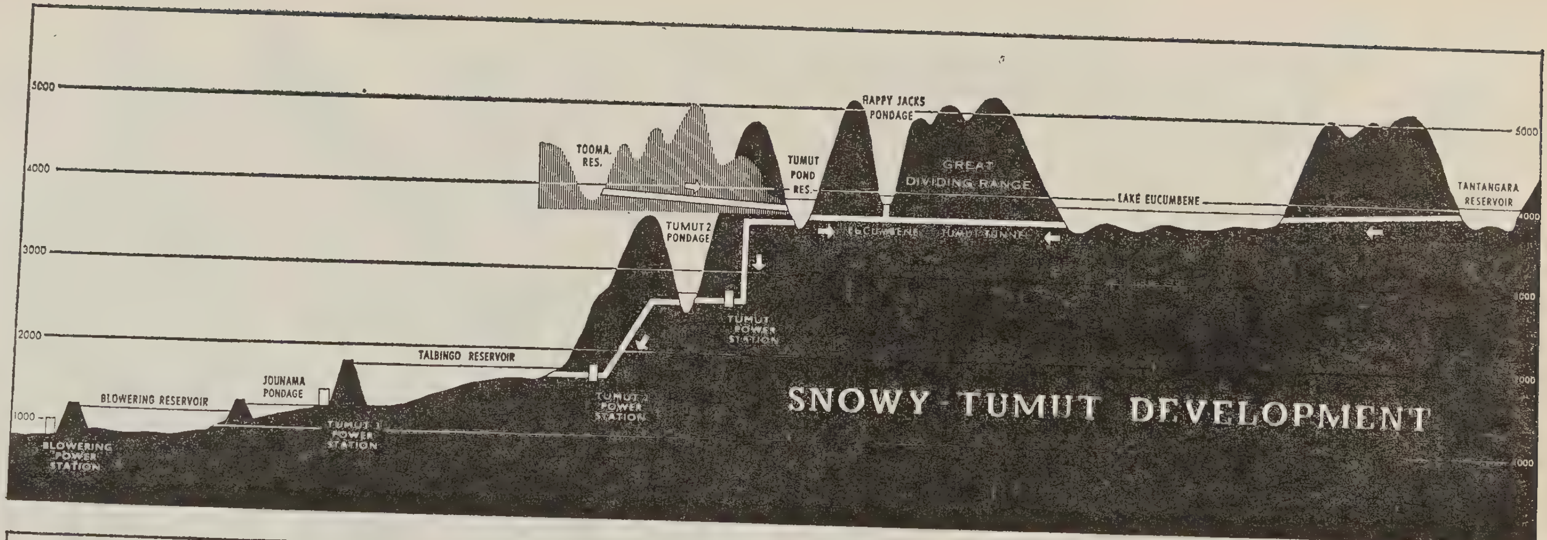

SNOWY MOUNTAINS SCHEME
LEGEND
Roads
Railways
Tunnels
Dams and Reservoirs
Power Stations
Lookouts
Main Watershed
State Boundaries
5 0 5 10
Scale of Miles
TUMUT 1000'
CANBERRA 2000'
BLOWERING
BLOWERING RESERVOIR
Batlow
Talbingo
JOUNAMA PONDAGE
TUMUT 3
A. C. T.
TALBINGO RESERVOIR
Yarrangobilly Caves
TANTANGARA RESERVOIR
Murrumbidgee River
MURRUMBIDGEE RIVER
MONARO HIGHWAY
N
S
E
W
Tumbarumba
THE GREAT DIVIDING RANGE
Kiandra
TUMUT RIVER
TUMUT 2 PONDAGE
Cabramurra 4890'
TUMUT PONDS RESERVOIR
HAPPY JACKS PONDAGE
Eucumbene River
SNOWY MOUNTAINS HIGHWAY
Tooma
Tooma River
TOOMA RESERVOIR
Adaminaby
Adaminaby Old Site
Bredbo
Tumut River
EUCUMBENE DAM
Eucumbene
LAKE EUCUMBENE
TO CORRYONG
Khancoban 1200'
Swampy Plain River
KHANCOBAN PONDAGE
MURRAY 2 PONDAGE
MURRAY 2
MURRAY 1
N. S. W.
MURRAY RIVER
COOMA 2700'
COOMA AERODROME
Bogong Creek
GEEHI RESERVOIR
Bella Vista
Geehi River
ISLAND BEND PONDAGE
Island Bend
PUMPING STATION
LAKE JINDABYNE
Eucumbene River
GUTHEGA
GUTHEGA PONDAGE
Snowy River
Berridale
TO BEGA & BOMBALA
Geehi
Smiggin Holes
Jindabyne
SNOWY RIVER
MT. KOSCIUSKO 7314'
ALPINE WAY
Thredbo
VIC.
DEAD HORSE GAP 5190'
REVISED FEB. 1958

PLATE 53


SNOWY - TUMUT DEVELOPMENT
5000
4000
3000
2000
1000
BLOWERING POWER STATION
BLOWERING RESERVOIR
JOUNAMA PONDAGE
TUMUT 3 POWER STATION
TALBINGO RESERVOIR
TUMUT 2 POWER STATION
TUMUT 2 PONDAGE
TUMUT POWER STATION
TOOMA. RES.
TUMUT POND RES.
HAPPY JACKS PONDAGE
GREAT DIVIDING RANGE
EUCUMBENE - TUMUT TUNNEL
LAKE EUCUMBENE
TANTANGARA RESERVOIR
5000
4000

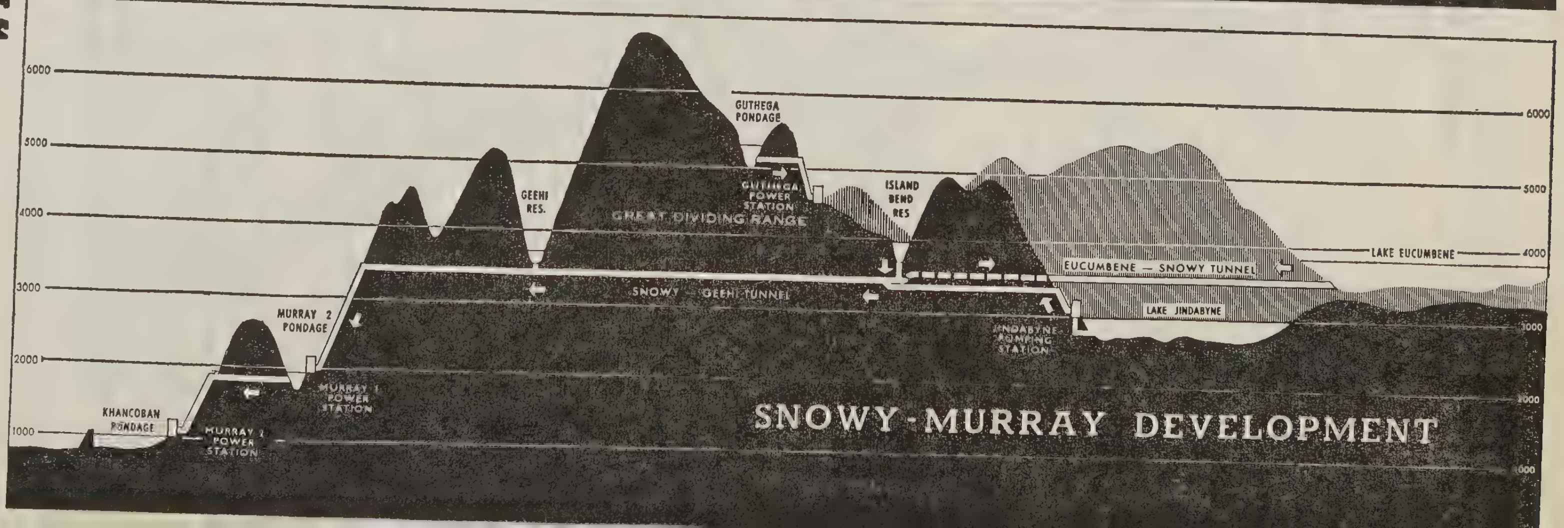

SNOWY - MURRAY DEVELOPMENT
6000
5000
4000
3000
2000
1000
KHANCOBAN PONDAGE
MURRAY 2 POWER STATION
MURRAY 2 PONDAGE
MURRAY 1 POWER STATION
GEEHI RES.
GREAT DIVIDING RANGE
GUTHEGA PONDAGE
GUTHEGA POWER STATION
SNOWY - GEEHI TUNNEL
ISLAND BEND RES
JINDABYNE PUMPING STATION
EUCUMBENE — SNOWY TUNNEL
LAKE JINDABYNE
LAKE EUCUMBENE
6000
5000
4000
3000
2000

PLATE 54

Snowy–Murray Development. The principal features of the Snowy–Murray Development are the diversion of the main stream of the Snowy River by tunnels, shafts, and pipelines westwards through the Great Dividing Range into the Swampy Plain River in the catchment of the Upper Murray, and the development of power on the western slopes of the Alps. The main works of the development are as follows.

(*a*) A tunnel from the Snowy River near Island Bend through the Great Dividing Range to Geehi Reservoir on the Geehi River, and two power projects between Geehi Reservoir and the Swampy Plain River near Khancoban. The power stations associated with these two power projects, Murray 1 and Murray 2, have a combined capacity of 1,500,000 kW.

(*b*) A tunnel from a small dam on the Snowy River near Island Bend to Eucumbene Dam to carry Snowy water to Lake Eucumbene for storage at times of high river flows. When river flows are lower than average, this stored water is returned towards Island Bend and thence through the Snowy-Geehi Tunnel to Geehi Reservoir and Murray 1 and Murray 2 Power Stations.

(*c*) A dam on the Snowy River near Jindabyne to store the residual flow of the Snowy and Eucumbene Rivers downstream from Island Bend and Eucumbene Dams, including the flows of major tributaries, the Crackenback and Mowamba Rivers; and a pumping plant, pipeline and tunnel to lift this water from Jindabyne Reservoir to the Snowy-Geehi Tunnel near Island Bend, where it joins the flow to the Geehi Reservoir for use through Murray 1 and Murray 2 Power Stations.

The power output of this section of the Scheme is increased by the Guthega Project, a subsidiary hydro-electric project on the Upper Snowy River above Island Bend with a generating capacity of 60,000 kW.

Utilisation of power from scheme

The future electric power plants on the mainland of Australia will be predominantly thermal or thermo-nuclear installations, and in an electrical system in which the greater part of the energy is generated in thermal plants it is usually found that the hydro installations operate to the best advantage on peak load. However, the existing New South Wales and Victorian systems include a proportion of relatively old and less efficient installations which, for reasons of fuel economy, are also best used for the production of peak load power. Therefore, in order to utilise the potential of the Snowy Mountains Scheme most effectively, the order of development is being arranged so that the early stations operate, initially, somewhat below the peak of the system load, with a progressive change to predominantly peak load operation as construction proceeds and as the load increases in magnitude.

The Snowy Mountains Scheme is situated about midway between the principal load centres of Sydney and Melbourne and is connected to those cities by 330 kV transmission lines. It is, consequently, in a position to take advantage of the diversity in the power requirements of these two load systems, a most important factor in so far as it affects the economy of operation of the supply systems of the two States. Although most of the output from the scheme will go to the States of New South Wales and Victoria, the Commonwealth Government has the right to draw from the scheme its requirements of power and energy for the Australian Capital Territory and for defence purposes. For convenience, the Commonwealth's requirements are drawn from the New South Wales transmission network by an exchange arrangement between the Commonwealth and the Electricity Commission of New South Wales. Electricity over and above that required by the Commonwealth Government is divided between the States of New South Wales and Victoria in the ratio 2:1.

Progress of scheme and future programme

The scheme's first power station, Guthega, of 60,000 kW initial capacity, came into operation in February 1955. It was followed by Tumut 1, an underground power station with a capacity of 320,000 kW, in 1959, and by the 280,000 kW Tumut 2 underground Power Station in 1962. Eucumbene Dam, which provides the major regulating storage for the scheme, was completed in May 1958. Tumut Pond Dam, completed in September 1958, provides the balancing storage for the power stations of the Upper Tumut Works. The first trans-mountain diversion of water from Lake Eucumbene to the Tumut River at Tumut Pond was made possible when the 14-mile Eucumbene–Tumut Tunnel was completed in June 1959. The 10½-mile Murrumbidgee–Eucumbene Tunnel and the 9-mile Tooma–Tumut Tunnel came into operation early in 1961. Following the completion of the Upper Tumut Works, construction activity was concentrated on the Snowy-Murray development. The first unit of this development, the Eucumbene-Snowy project which comprises Island Bend Dam and the 15-mile Eucumbene-Snowy Tunnel, commenced diverting Snowy River water to storage in Lake Eucumbene in August 1965. Completion of a 9-mile trans-mountain Snowy-Geehi Tunnel, the 7½-mile Murray 1 Pressure Tunnel, the first of the 1-mile long Pressure Pipelines, and the first two units of the 950,000 kW

Murray 1 Power Station in April 1966 allowed the first diversion of the water from the Snowy River to the Murray River in the west. All of the ten turbo-generators were brought into commercial operation with the opening of the Murray 1 Project in July 1967. The total installed capacity of the scheme has now reached 1,610,000 kW.

Khancoban Dam, designed to regulate power station releases before their discharge into the Murray River, was completed in February 1966. The Murray 2 Project in the base of the open cut excavated in the bank of Khancoban Reservoir downstream of Murray 1 Project is expected to come into operation late in 1969. The four units of Murray 2 Power Station totalling 550,000 kW are scheduled to come into commercial operation in the first half of 1969.

Construction is also proceeding on the Jindabyne Project. The earth and rockfill dam was completed in September 1967, and the pumping station and Jindabyne-Island Bend Tunnel came into service early in 1969.

Blowering Dam on the Tumut River came into service in May 1968, and the 80,000 kW Blowering Power Station, also under construction, will begin commercial operation in October 1969 when the stored water in the Blowering Reservoir is released for the irrigation season downstream on the Murrumbidgee Irrigation Areas.

For the Tumut 3 Project the construction of Jounama Dam was completed in 1968 so that the storage of water in Blowering Dam could commence. Work is under way on the remaining sections of the Tumut 3 Project, and the six units in the power station are scheduled to be brought into service progressively from 1972 to 1974.

STATES AND TERRITORIES

New South Wales

In Year Book No. 39 an account was given in some detail of the origin and development of electricity generation and distribution in New South Wales. At present the following three main Acts govern electricity supply in New South Wales.

The Local Government Act, 1919, which lays down the various rights and responsibilities of local government bodies in the establishment and operation of electricity trading undertakings.

The Electricity Development Act, 1945–1968, which established the Electricity Authority of New South Wales as the body responsible for the co-ordination of electricity supply throughout the State.

The Electricity Commission Act, 1950–1965, which constituted the Electricity Commission of New South Wales as the major generating authority and not subject to the provisions of the Electricity Development Act.

Electricity Commission of New South Wales and electricity supply authorities

The main function of the Commission is the generation and transmission of electricity, which it sells in bulk to distributing authorities (mainly local government bodies) throughout a large part of the State, to the Government railways and to certain large industrial consumers. As the major generating authority, it is also responsible for the development of new power sources except in the Snowy Mountains region.

The retail sale of electricity to the public is, in general, carried out by separate electricity supply authorities. At 30 June 1968 there were 41 supply authorities throughout the State, 34 electricity county councils (consisting of groups of shire and/or municipal councils), 2 city and 2 municipal councils, 1 shire council, and 2 private franchise holders. In addition to the Electricity Commission, 2 coal companies supply electricity in bulk to retail supplying authorities. Most of the small power stations which had operated in many country centres have closed down as the main transmission network has been extended.

In recent years, most electricity distribution areas have been consolidated on a district basis. Generally, these consolidations have taken the form of a county district consisting of a number of neighbouring shire and municipal and city areas grouped for electricity supply purposes, and administered by a county council comprising representatives elected by the constituent councils. Of the 224 cities, municipalities and shires in New South Wales, 215 are included in one or other of the thirty-four electricity county districts. The majority of these county districts have been constituted since 1945. The largest of the county councils is the Sydney County Council, which at 30 June 1968 was supplying 572,772 consumers in the Sydney metropolitan area.

Electricity Authority of New South Wales

The Electricity Authority was constituted for the purposes of promoting and regulating the co-ordination, development, expansion, extension, and improvement of electricity supply throughout the State. The following are the main functions of the Authority.

Distribution. The approval of the Authority is required for the establishment or acquisition of an electricity trading undertaking by a local government council, for the granting or renewing by such a council of electricity franchise agreements or corresponding agreements with other councils, and for the giving or taking of bulk supplies of electricity. It also has power to formulate proposals for the establishment of county councils. In exercising these powers, the Authority is concerned mainly with seeing that distributing authorities are sufficiently strong to provide an economical, efficient and satisfactory service. Its most important activities in this regard are in investigating supply areas and in making recommendations to the Minister for the consolidation of such areas into county districts.

Rural electrification. The Authority administers the rural electricity subsidy scheme under which rural electrification throughout the State has progressed very rapidly (*see* page 1104).

Safety. The Electricity Development Act, 1945–1968 contains provisions for the making of regulations relating to most aspects of safety, and these powers are being used more and more extensively. Safety regulations now in force cover such matters as inspection of consumers' installations, licensing of electricians and electrical contractors, approval of electrical appliances, safety of linesmen, and overhead line construction.

Generation and transmission. The approval of the Authority is required for the establishment or extension of power stations and main transmission lines (with the exception of those of the Electricity Commission).

Traffic route lighting. The authority administers a Traffic Route Subsidy Scheme under which a subsidy is paid to councils for the lighting of traffic routes to a standard approved by the Authority.

Generation and transmission

Except in the Snowy Mountains district and in one or two other areas New South Wales is lacking in major water power potential, and for the generation of electricity the State is dependent mainly on steam power stations. During the year ended 30 June 1968, coal-fired power stations generated 89.3 per cent of the State's energy requirements, hydro-electric stations 10.3 per cent and internal combustion plants 0.4 per cent. Of the 10.3 per cent generated from hydro-electric stations approximately 81 per cent was from the Snowy Mountains Scheme. This proportion will increase with the expansion of that scheme, but it is not expected that more than 15 per cent to 20 per cent of the State's power needs will be supplied from this source. The coal-fired steam power stations (and possibly atomic power stations in the future) will therefore continue to supply the greater part of requirements.

Major generating stations. At 30 June 1968 the major power stations of the State system of the Electricity Commission of New South Wales and their effective capacities were as follows: *Steam*—Vales Point (Lake Macquarie), 875,000 kW; Munmorah (Tuggerah Lakes), 700,000 kW; Bunnerong (Sydney), 375,000 kW; Wangi (Lake Macquarie), 330,000 kW; Tallawarra (Lake Illawarra), 320,000 kW; Wallerawang (near Lithgow), 240,000 kW; Pyrmont (Sydney), 200,000 kW; White Bay (Sydney), 172,000 kW; Balmain (Sydney), 107,000 kW; Port Kembla, 61,000 kW; Zarra Street (Newcastle), 42,000 kW; Muswellbrook, 30,000 kW; Lithgow, 27,000 kW; Tamworth, 27,000 kW; Maitland, 20,000 kW; Penrith, 20,000 kW; Liverpool, 20,000 kW; *Hydro*—Hume (near Albury), 50,000 kW; Warragamba (near Penrith), 50,000 kW; Burrinjuck (near Yass), 20,000 kW. There were also various other steam, hydro and internal combustion stations aggregating 36,000 kW. The total effective capacity of the Electricity Commission's system was 3,722,000 kW. The greater part of the Commission's generating plant is concentrated within a hundred mile radius of Sydney—the largest stations outside this area being located at Hume, Muswellbrook and Tamworth.

Major transmission network. The retailing of electricity to 97 per cent of the population of New South Wales is in the hands of local distributing authorities, which obtain electricity in bulk from the Commission's major State network. This network of 330 kV, 132 kV, 66 kV and some 33 kV and 22 kV transmission lines links the Commission's power stations with the load centres throughout the eastern portions of the State, extending geographically up to 400 miles inland.

At 30 June 1968 there were in service 1,092 route miles of 330 kV (including 64 miles operating for the time being at 132 kV) and 2,395 miles of 132 kV transmission lines (including 55 miles operating for the time being at 66 kV or lower). There were also in service 2,598 miles of transmission line of 66 kV and lower voltages, and 83 miles of underground cable. The installed transformer capacity at the Commission's 133 sub-stations was 13,158,150 kVA.

Separate systems and total State installed capacity. A number of small plants which supply isolated towns and villages have not yet been interconnected with the main network. Some local government bodies have undertaken the development of independent power stations. Of these, the more important are: the Northern Rivers County Council, which has constructed a steam power station at Koolkhan (near Grafton) with an installed capacity of 28,750 kW, and the North-West County Council, which has established a 15,000 kW steam power station on the Ashford coalfield. The aggregate effective capacity for the whole of the New South Wales systems and isolated plants was 3,824,910 kW at 30 June 1968 and the number of ultimate consumers at this date was 1,470,761.

Future development

The major new thermal stations already built and those now being developed on the coalfields will become the main base load supply sources for the State. Vales Point and Wangi, on Lake Macquarie, Wallerawang, near Lithgow, and Tallawarra, on Lake Illawarra, have been completed.

Construction of the Munmorah Power Station, located between Lakes Munmorah and Budgewoi (on the central coast), is in progress. The plant at Munmorah will ultimately comprise four 350,000 kW generating units, the first of which was commissioned in 1967, the second in 1968, and the third and fourth units will follow at yearly intervals thereafter.

During the first half of 1965 work commenced on the Liddell Power Station project in the Hunter Valley, between Singleton and Muswellbrook. The designed capacity of Liddell is 2,000,000 kW, consisting of four 500,000 kW generating units, and is the biggest thermal power station yet planned in Australia. The first unit is scheduled for commissioning in 1971, and the second, third and fourth units in 1972, 1973 and 1974 respectively.

The development of the 330 kV main system is continuing. New work in hand includes the provision of 330 kV transmission from Liddell direct to Sydney and the construction of major 330 kV transmission centres at Tamworth and Newcastle and later at Armidale. Plans to augment the transmission system during the next five years provide for the construction of 900 route miles of 330 kV lines, 1,200 miles of 132 kV overhead lines, and 26 new sub-stations.

Hydro-electricity

The greater part of the hydro-electric potential of New South Wales is concentrated in the Snowy Mountains area (*see* Snowy Mountains Hydro-electric Scheme, page 1098). Apart from this area, major hydro-electric stations are in operation at the Warragamba Dam (50,000 kW), Hume Dam (50,000 kW), Burrinjuck Dam (20,000 kW), and Keepit Dam (6,000 kW). The output of Warragamba Power Station depends upon the availability of water surplus to the requirements of the Sydney metropolitan area, and the output of the other stations on the release of water for irrigation. There are, in addition, four smaller hydro-electric installations in operation in various parts of the State.

Rural electrification

When the Electricity Authority of New South Wales was constituted in 1946 less than one-quarter of New South Wales farms within reasonable reach of public electricity supply systems were being served with electricity. Under a subsidy scheme approved in August 1946, local electricity suppliers receive subsidies from the Electricity Authority towards the cost of new rural lines. The amount of subsidy is based on the estimated cost of the proposed extension and the number of consumers able to be served by the new lines. The scheme was designed to encourage local electricity supply authorities to construct the more economic extensions first by fixing a limit to the cost for which suppliers could be subsidised. Originally this limit was $500 per consumer when averaged over the cost of the whole extension, but the limit was raised to $800 in December 1953. Some subsidy was paid on higher cost extensions, but the excess over an average of $800 was not subsidised.

To assist supply authorities in extending supply to less populated, and thus high-cost, areas of the State the subsidy scheme was extended from May 1959 to provide for payment of increased subsidy in respect of extensions where the average capital cost per consumer lies within the range of $1,200–$1,600.

Between August 1946 and June 1968, applications for subsidy had been made by electricity suppliers to the Authority covering rural extensions costing $84 million to give supply to some 60,653 farming properties and 36,231 other rural consumers and involving 59,798 miles of line. The greater part of this work had been completed at 30 June 1968. At this date the Authority was committed to the payment of $34,533,158 in subsidies, of which $21,385,374 had been paid.

Victoria

In Year Book No. 39 a detailed description is given of the development of electricity generation in the cities of Melbourne, Geelong, Bendigo and Ballarat up to the time of transfer of control of electricity undertakings in those cities to the State Electricity Commission of Victoria. An account is also given of the events culminating in the establishment of the Commission in 1919, and of the early developments in the Commission's undertakings.

Constituted by the *Electricity Commissioners Act* 1918, the State Electricity Commission is a semi-governmental authority administered since 1921 by a full-time Chairman and three part-time Commissioners. The principal duty of the Commission is to co-ordinate and extend on an economic basis the supply of electricity throughout Victoria. For this purpose it is vested with power to erect, own and operate power stations and other electrical plant and installations, supply electricity retail to individual consumers or in bulk to any corporation or public institution, acquire and operate electricity undertakings, develop, own and operate brown coal open cuts and briquetting works, and develop the State's hydro-electric resources. From its own revenues, which it controls, the Commission must meet all expenditure in the operation of its power, fuel and subsidiary undertakings, provide for the statutory payment of 3 per cent of its revenue to State Consolidated Revenue, and meet depreciation and all other charges on capital funds.

The Commission is the controlling authority for all electrical undertakings in Victoria. It is responsible for the registration of electrical contractors, the licensing of electrical mechanics, the control of installation methods and material, and the testing and approval of electrical equipment and appliances. Incidental to its main operations, the Commission owns and operates the tramway systems in Ballarat and Bendigo.

State Electricity Commission of Victoria

Since it began operating in 1919 the State Electricity Commission has expanded and co-ordinated the production and supply of electricity on a State-wide basis to the point where its system now generates almost all the electricity produced in Victoria and serves over 98 per cent of the population. Development of Victoria's electricity system is based on the utilisation for both power and fuel of Victoria's extensive brown coal resources in the Latrobe Valley in eastern Gippsland, with supplementary development of the hydro-electric potential of north-eastern Victoria. Victoria is entitled to one-third of the electricity from the Snowy Mountains Hydro-electric Scheme, after the Commonwealth has taken the power it needs for its purposes. Victoria also shares with New South Wales in the electricity generated at Hume Hydro Station on the River Murray. Fuels used at S.E.C. power stations for 1967–68 were as follows; brown coal, 17,294,000 tons; briquettes, 456,000 tons; black coal, 29,000 tons; and oil, 34,000 tons. All the brown coal and briquette fuel is supplied by undertakings which the Commission itself owns and operates. Output of brown coal in 1967–68 from the three open cuts at Yallourn, Yallourn North and Morwell totalled 22,520,734 tons, of which 17,294,280 tons were used in the Commission's own power stations, and 4,805,107 tons were manufactured into 1,744,948 tons of brown coal briquettes, 26 per cent of the briquette output then being used for electricity production in metropolitan and provincial steam power stations. The two functions, generation of electricity and production of fuel, are closely integrated. Apart from the large proportion of brown coal and briquette fuel consumed in the power stations, the process of briquette manufacture results also in the generation of electricity, since the steam needed for processing the raw coal for briquetting is first used to operate turbo-generators.

Electricity supply

At 30 June 1968 the number of ultimate consumers in Victoria was 1,173,110. Of these, 1,168,045 were served by the State system and 5,065 by local country undertakings.

Complete electrification of the State is now within sight. By 30 June 1968 about 985,000 homes and 70,610 farms were supplied with electricity. Of the new consumers connected to supply each year, more than two-thirds are outside the metropolitan area. New farm connections approximate 3,000 a year. It is expected that fewer than 3,000 homes and 1,250 farms in remote and isolated areas are now out of reach of public supply mains. Efforts will continue to be made to supply as many of these as possible.

The Commission sells electricity retail in areas of Victoria supplied with electricity, except part of the metropolitan area, where it sells in bulk to eleven municipal undertakings which operate as local retail supply authorities under franchises granted before the Commission was established and in four small country areas where municipal or private undertakings distribute, and in two locations generate, electric power. Bulk supply is also being provided at present to several New South Wales municipalities and irrigation settlements bordering the River Murray.

The Commission's retail consumers numbered 994,434 at 30 June 1968. Of these 788,407 are domestic, 70,283 are industrial and 85,432 are commercial. Retail supply is administered through the metropolitan branch and ten extra-metropolitan branches (Barwon, Eastern Metropolitan, Gippsland, Mallee, Midland, Mid-Western, North-Eastern, Northern, South-Western and Wimmera). At 30 June 1968 there were branch and district supply offices in Melbourne and 98 other cities and towns in Victoria.

Electricity production, transmission and distribution

Electricity generated in the State system or purchased by it totalled 11,935 million kWh in 1967–68, or more than 99 per cent of all Victoria's electricity for public supply. The system comprises a series of thermal and hydro-electric power stations. Inclusive of generator capacity both within the State and available to the Victorian system from outside the State, the total installed generator capacity at 30 June 1968 was 3,121,000 kW. Power stations are interconnected and feed electricity into a common pool for general supply. The major power station in this interconnected system is the Hazelwood brown coal burning power station near Morwell, which alone generates over 40 per cent of Victoria's electricity. Hazelwood now has five of its planned eight 200,000 kW generating sets in service. Other power stations in the interconnected system comprise two further base load brown coal burning power stations, Morwell and Yallourn; steam stations in Melbourne (Newport, Richmond and Spencer Street), Geelong and Ballarat, and also at Red Cliffs, which has, in addition, some internal combustion plant; and hydro-electric stations at Kiewa, at Eildon, on the Rubicon and Royston Rivers near Eildon, and at Cairn Curran. All generators for public supply within Victoria are Commission-owned, except Spencer Street Power Station, which remains the property of the Melbourne City Council, although operated as a unit in the interconnected system and two small generators at Omeo and Mallacoota. A 300 kV transmission line links the Victorian system with the Snowy Mountains undertaking, and also provides facilities for interconnection between the Victorian and New South Wales State generating systems. Also linked with the Victorian interconnected system is the hydro station at Hume Dam on the River Murray. This power station is operated by the Electricity Commission of New South Wales. Output and operating costs are shared by Victoria and New South Wales. In meeting the total demand on the system, which fluctuates throughout the day and from month to month, each group of stations in the interconnected system is assigned a predetermined function dependent upon the availability of power from each group and the economics of generation. The various stations are utilised in the combination that will meet the system load most economically at a given time.

The electrical transmission and distribution system in the State supply network at 30 June 1968 comprised 56,138 miles of power-lines, 24 terminal receiving stations, 95 main transmission sub-stations, and more than 55,000 distribution sub-stations. Main transmission is by 330 kV, 220 kV and 66 kV power lines which supply the principal distribution centres and also provide interconnection between the power stations. The 330 kV and 220 kV systems total 1,501 route miles.

Future development

Major new construction is concentrated on the erection, on the brown coal fields of the Latrobe Valley, of a large brown coal burning power station (Hazelwood), which is designed to operate on raw brown coal fuel supplied by belt conveyor direct from the Morwell open cut. Hazelwood Power Station is the largest project yet undertaken by the Commission and is designed to have a capacity of 1,600,000 kW in 1971. By that year the State's power resources, including Victoria's share of the output of the Snowy scheme, will have increased by 21 per cent to 3,788,000 kW. The first of Hazelwood's eight 200,000 kW turbo-generators was commissioned in October 1964, the second generating set went into service in 1965, the third set in 1966, the fourth set in 1967 and the fifth set in 1968. Three other 200,000 kW sets will follow at yearly intervals. Power generated at Hazelwood Power Station is transmitted at high voltage to Melbourne metropolitan terminal stations for distribution through the State supply network. To follow the Hazelwood project a new power station —to be known as Yallourn 'W'—will be built about half a mile west of the present Yallourn Power Station. It will also operate on brown coal which will be supplied by conveyors from Yallourn open cut. Yallourn 'W' will have two 350,000 kW turbo-generators, the first to be in service in 1972 and the second in 1973.

Local country electricity undertakings

At 30 June 1968 in country areas in Victoria there were two independent electricity undertakings at Omeo and Mallacoota generating and distributing their own local supply. In addition there were independent electricity distributing undertakings at Ararat and Stawell. Under the State Electricity Commission's rural electrification programme almost all the independent local country undertakings will ultimately be acquired and absorbed into the State system. For the year 1967–68 the total production of the independent undertakings was 21 million kWh. The number of consumers at 30 June 1968 was 5,065. The operation of the independent undertakings is governed by the *Electric Light and Power Act* 1958, which is administered by the State Electricity Commission.

Queensland

In Year Book No. 39 an account is given of the growth of electricity generation in Queensland, with particular reference to south-eastern Queensland, and of the events leading up to the establishment in 1937 of the State Electricity Commission of Queensland. In Year Book No. 53 an account is given of the post-war development and organisation of the electricity supply in Queensland.

Electricity supply in Queensland is governed by the following Acts which are administered by the Commission.

'*The State Electricity Commission Acts*, 1937 *to* 1965.' These Acts constituted the Commission and define its powers and duties.

'*The Electric Light and Power Acts*, 1896 *to* 1967.' These Acts relate to the constitution of electric authorities, except the Southern Electric Authority and the Northern Electric Authority, and define their powers and duties and the conditions under which electricity is to be supplied and used.

'*The Regional Electric Authorities Acts*, 1945 *to* 1964.' These Acts provide for the constitution of Regional Electricity Boards representative of the Commission and the Local Authorities within each region, and define their powers and responsibilities.

'*The Southern Electric Authority of Queensland Acts*, 1952 *to* 1964.' These Acts established the Southern Electric Authority and define the powers and responsibilities of the Authority.

'*The Northern Electric Authority of Queensland Acts*, 1963 *to* 1964.' These Acts established the Northern Electric Authority. They also define its powers and responsibilities.

'*The Electrical Workers and Contractors Acts*, 1962 *to* 1968.' These Acts provide for the certification of electrical workers and for the licensing of electrical contractors.

State Electricity Commission of Queensland

The Commission commenced to function in January 1938. The Commission is the statutory authority concerned, *inter alia*, with the administration of electricity supply legislation, the general control, organisation and efficient development of the electricity supply industry in Queensland, the forward planning of such development, the control of electricity charges, the administration of regulations and rules relating to safety, the raising of capital, the provision of engineering and consulting services, the promotion of the use of electricity, particularly in manufacturing and rural industries, and the fixing of standards. In addition, it is an authority to which consumers may appeal on matters in dispute between them and their electric authorities. The Commission is also empowered to own directly and operate generating stations and transmission lines and to sell electricity in bulk, but up to the present it has not been found necessary or desirable to implement this power.

Organisation

Regional electrification, with centralised generation and main transmission, is the predominant feature of the organisation of the electricity supply industry in Queensland. The more populous eastern part of the State is served by three major networks.

The southern network embraces the areas of supply of the Southern Electric Authority, the Brisbane City Council, the Wide Bay-Burnett Regional Electricity Board, and the Dalby Town Council. Generation and main transmission in this area are the responsibility of the Southern Electric Authority, which sells energy in bulk to the other three Authorities. The Wide Bay-Burnett Board also operates its own base load power station at Howard. The Southern Electric Authority is also responsible for the distribution of electricity to a large rural area outside metropolitan Brisbane.

The central network is within the area of supply of the Capricornia Regional Electricity Board, which is responsible for the generation, main transmission and distribution of electricity.

The northern network covers the areas of supply of the Cairns, Townsville, and Mackay Regional Electricity Boards. Generation and main transmission are the responsibility of the Northern Electricity Authority, and electricity is purchased in bulk for distribution by the three Regional Electricity Boards. In addition, the Cairns Regional Electricity Board operates small internal combustion generating stations at certain isolated centres in its area, and the Townsville Regional Electricity Board supplies the western area of its region by means of a distribution system based on an internal combustion station at Hughenden.

At present there is no interconnection between these three main networks. West of the three main networks the form of organisation which has been adopted is determined by the stage of electrical development which has been reached. Immediately west of the Capricornia region the Central Western Regional Electricity Board operates with generation being progressively centralised at internal combustion stations at Longreach and Barcaldine. Other smaller regions of electricity supply are centred on Roma and Mount Isa. In addition, parts of southern Queensland are supplied by the Tenterfield Municipal Council and the North West County Council of New South Wales. In the remaining parts of Western Queensland there are a number of isolated electricity undertakings operated by Shire Councils.

The organisation of the industry in Queensland is moving progressively towards a greater integration of generating authorities so that the production of electricity can be centred to an increasing extent on larger and more efficient power stations.

Electricity generation, transmission and distribution

Electricity generated in the State is based primarily on black coal, 84.1 per cent of the total production during 1967–68 being derived from this fuel. Hydro-electric stations, located mainly in north Queensland, provided 14.5 per cent, and the balance of the production was provided from internal combustion stations and a gas turbine station. Most of the internal combustion stations use oil as fuel but the power station at Roma uses a combination of locally produced natural gas and crude oil. The turbine station at Rockhampton uses fuel oil as its primary energy source. Electricity generated by public electricity undertakings in Queensland during 1967–68 totalled 4,920 million kWh. A further 55 million units were purchased in bulk from other producers of electricity for re-distribution to consumers.

At 30 June 1968 the total generating capacity of all Queensland power stations was 1,407,245 kW which comprised 1,219,865 kW of steam plant, 135,205 kW of hydro-electric plant, 27,175 kW of internal combustion plant and a 25,000 kW gas turbine unit. In the southern electricity network major power stations are as follows: Bulimba 'A' (92,500 kW), Bulimba 'B' (180,000 kW), New Farm (75,000 kW), Tennyson 'A' (120,000 kW), Tennyson 'B' (120,000 kW), Swanbank 'A' (264,000 kW), and Howard (37,500 kW). In the central network major power stations are at Rockhampton (52,500 kW steam and 25,000 kW gas turbine) and Callide (90,000 kW). In the northern electricity network the principal power stations are at Townsville (37,500 kW), Kareeya (72,000 kW), Barron Gorge (60,000 kW) and Collinsville (30,000 kW). With the exception of the 25,000 kW gas turbine station at Rockhampton and the Kareeya, Barron Gorge and Somerset Dam hydro-electric stations all other stations in the large eastern networks are thermal, using coal as their primary energy source.

The electrical transmission and distribution systems within the State comprised 42,600 circuit miles of electric lines at 30 June 1968. The main transmission voltages are 132 kV, 110 kV, 66 kV and in certain areas 33 kV. Extensive rural electrification has been undertaken using the single wire earth return system. At 30 June 1968 the total number of electricity consumers was 528,000, of whom 208,000 were in metropolitan Brisbane.

Future development

Major new construction is concentrated on the development of four new power stations sited on coalfields. These are at Swanbank (396,000 kW and 480,000 kW) on the West Moreton coalfield near Ipswich, Callide (120,000 kW) on the Callide open-cut coalfield near Biloela, and at Collinsville (120,000 kW) on the Collinsville coalfield. These stations will supply the southern, central and northern networks, respectively. Cooling water for the Callide station is provided from a dam on Callide Creek. A dam on the Broken River will serve the Collinsville station. The water requirements of the Swanbank power station will be supplied from the Moogerah Dam. The Swanbank A station will consist of six 66,000 kW generating sets. Four of the six sets at this station had been commissioned by 30 June 1968. The fifth set was commissioned in September 1968 and the final set is scheduled to be commissioned in May 1969. Gas turbine plants with generating capacities of 30,000 kW and 60,000 kW will be commissioned at Swanbank and Middle Ridge in 1969 and 1970, respectively. These units will be used as peak load plant. The planned ultimate capacity of Swanbank B power station is 480,000 kW. It will comprise four 120,000 kW generating sets, one of which will be commissioned annually from 1970 to 1973.

At 30 June 1968 three 30,000 kW generating sets had been commissioned at the Callide power station. The final 30,000 kW set is scheduled for commissioning early in 1969. A 25,000 kW gas turbine unit was installed at Rockhampton in December 1967. At Collinsville power station, the first 30,000 kW set was commissioned in June 1968 and the second in December 1968. The third and fourth sets of similar size, are scheduled for commissioning in 1970 and 1971 respectively. Investigations are currently proceeding into the next major power station, or stations, to supply south, central and northern Queensland after the early 1970's. The economics of interconnecting the three major grids are an essential part of these investigations.

South Australia

A general historical survey concerning the electricity supply industry in South Australia is given in Year Book No. 39, page 1186. The survey traces the development of the industry from its formation in South Australia in 1895 until the establishment of the South Australian Electricity Commission in 1943.

Electricity Trust of South Australia

In 1946 the assets of the Adelaide Electric Supply Co. Ltd were transferred to a newly formed public authority, the Electricity Trust of South Australia, which became responsible for unification and co-ordination of the major portion of the State's electricity supply and which took over the powers previously vested in the South Australian Electricity Commission. In addition to the powers specified in the Adelaide Electric Supply Company's Acts, 1897–1931, the Trust may supply electricity direct to consumers within a district or municipality with the approval of the local authority, and by agreement with other organisations which generate or supply electricity, arrange to inter-connect the mains of the Trust with those of other organisations, and give or receive supplies of electricity in bulk.

Capacity and production

Three main categories or organisations generate electric power in South Australia, namely: (*a*) governmental, which includes the Electricity Trust; (*b*) local authorities, e.g. municipal and district councils; and (*c*) other, including individuals and firms engaged primarily in generating power for sale, firms generating power primarily for their own use but supplying outside consumers, and firms generating power solely for their own use.

Of the total installed capacity in South Australia at 31 December 1968, the Electricity Trust operated plant with a capacity of 841,000 kW, and is the most important authority supplying electricity in the State. There were approximately 408,000 ultimate consumers of electricity in the State, of whom 392,000 were supplied directly and approximately 11,100 indirectly (i.e. through bulk supply) by the Trust. Its major steam stations are Osborne 'B' (240,000 kW), Port Augusta Playford 'A' (90,000 kW) and Playford 'B' (240,000 kW), and Torrens Island (240,000 kW).

The Trust operates two smaller power stations. The Mt Gambier station has an installed capacity of 21,800 kW and burns either wood waste or fuel oil. The other station at Port Lincoln has a 5,000 kW steam and a 4,600 kW diesel plant. Both locations are connected with the Trust's interconnected system with 132 kV lines.

No hydro-electric potential exists in South Australia. Steam generating units comprise 98 per cent of installed capacity and the balance is internal combustion equipment.

Leigh Creek and other new capacity

Fairly extensive deposits of low grade sub-bituminous coal are obtainable at Leigh Creek, about 360 miles north of Adelaide. Under the Electricity Trust of South Australia Act, 1946, the Trust was given authority to develop Leigh Creek coal for use in its own undertakings and also for sale to other consumers. Production from the Leigh Creek field commenced in 1944, and in the year ended 30 June 1968, 2,081,290 tons of coal were produced, practically all of which was used by the electricity undertaking at the Port Augusta Playford Power Stations, which use Leigh Creek coal exclusively.

A power station is being constructed on Torrens Island near Adelaide consisting of four 120,000 kW turbo-alternators and associated boilers modified to use both natural gas or oil and will be completed by 1971. The No. 2 unit consisting of 120,000 kW turbo-alternator and associated boiler was placed on load for the first time in June 1968.

Western Australia

Since 1952 the State Electricity Commission of Western Australia has generated and distributed all electric current in the Perth metropolitan area. For information on the early history of electricity supply in the metropolitan area, *see* Year Book No. 39, page 1189.

State Electricity Commission of Western Australia

The State Electricity Commission of Western Australia was established by the *State Electricity Commission Act, 1945*, and, as at present constituted, consists of nine members, including the Chairman, appointed by the Governor. Four of the Commissioners are representatives of consumers, one for the metropolitan area, two for the rest of the State and one representing commercial consumers. Of the remaining five, one is the Under Treasurer of the State or his deputy, one represents employees of the Commission and three are required to be qualified engineers.

The Commission is empowered to co-ordinate all power undertakings in the State and to encourage and promote the use of electricity and other power, especially for industrial, manufacturing and rural purposes.

General pattern of electricity supply

The State Electricity Commission gives central power station supply to the metropolitan area, an area of approximately 30,000 square miles in the South-West and Great Southern Areas, and an area extending eastward from Perth to Koolyanobbing. The policy of extending power supplies to rural holdings is continuing, and at 30 September 1968 some 9,660 such consumers were connected. A scheme known as the Northern Areas State Power Scheme is also being developed, and a depot has been established in the Geraldton area where the Commission purchases power in bulk to supply districts north to Northampton and south to Dongara. It also supplies Port Hedland with power which is generated by a diesel station situated in the town.

In the other areas of the State, towns are supplied by the local authority or by a concessionaire operating under an agreement with the local authority and the Commission. Power stations operated under these conditions are exclusively diesel of varying sizes.

In Kalgoorlie the large goldmines generate their own power requirements. The Kalgoorlie Town Council operates a 50-cycle diesel station to supply A.C. consumers in Kalgoorlie and Boulder. The D.C. stations of the Kalgoorlie and Boulder Town Councils will continue to operate for some time at least.

The total number of consumers at 30 June 1968 was 238,252, of whom 216,991 were supplied by the Commission.

The Commission has developed its system to provide for the rapid expansion of industry and housing, and generating plant has increased almost eight-fold in the past twenty-one years. The four major power stations in the system are interconnected with the South-West Power Station at Collie, enabling the most economical units to be used as a base load station. Continuous development of the transmission and distribution system is also being undertaken to keep pace with the growth in consumer demand, which is being maintained at a high level. The activities of the interconnected system for the year 1967–68 were as follows: plant capacity, 469,500 kW; maximum load, 456,000 kW; units generated, 1,672,961 kW; fuel used per unit (kWh) generated, 1.34 lb; coal used, 897,922 tons.

New projects

The power station at Muja (near Collie) was completed in January 1969 when a fourth 60 MW turbo-alternator was commissioned, giving the station a total capacity of 240 MW. Contracts have been let for four 120,000 kW oil-fired units for a new station being built at Kwinana. It is expected that these units will be commissioned in 1969, 1970, 1971 and 1972.

Tasmania

A considerable part of the water catchment in Tasmania is at high level, with a substantial natural storage available, and this has made it possible to produce energy at lower cost than elsewhere in Australia, or in most other countries. Another factor contributing to the low cost is that rainfall is distributed fairly evenly throughout the year with comparatively small yearly variations. The abundant and comparatively cheap supplies of electricity and other natural resources have attracted to Tasmania a number of important secondary industries, including large electro-chemical and metallurgical works with high load factor (in consequence of which the system load factor is also very high—70 per cent), for which energy costs constitute a large proportion of the total cost of production. The continuous power demand of these organisations when plant is in full operation aggregates 390,000 kW. For information on hydro-electric development in Tasmania prior to the establishment of the Hydro-Electric Commission in 1930, *see* Year Book No. 39, pages 1192–3.

Hydro-Electric Commission

In 1929 the Government passed the *Hydro-Electric Commission Act* 1929, which established the Hydro-Electric Commission and vested in the Commission, with some minor exceptions, the right to use the waters of the State of Tasmania, and authorised it to develop and reticulate electric power for all purposes. In 1930 this corporate body took over the State hydro-electric undertaking and the business of the Hydro-Electric Department.

The total installed capacity of alternators in the various power stations operating now, under construction, or projected is as follows.

Power stations	*Water system*	*Date of entry into system(a)*	*kW*
Waddamana 'B'	Great Lake	1944	48,000
Tarraleah	Derwent	1938	90,000
Butlers Gorge	Derwent	1951	12,200
Tungatinah	Nive/Ouse/Little Pine	1953	125,000
Trevallyn	South Esk(*b*)	1955	80,000
Lake Echo	Little Pine/Ouse	1956	32,400
Wayatinah	Derwent	1957	38,250
Liapootah	Derwent	1960	83,700
Catagunya	Derwent	1962	48,000
Poatina	Great Lake	1964	250,000
Tods Corner	Arthurs Lake	1966	1,600
Meadowbank	Derwent	1967	40,000
Cluny	Derwent	1967	17,000
Repulse	Derwent	1968	28,000
Rowallan	Mersey-Forth	1968	10,450
Lemonthyme	Mersey-Forth	1969	51,000
Devils Gate	Mersey-Forth	1969	60,000
Wilmot	Mersey-Forth	1970	30,600
Bell Bay Thermal	..	1970	120,000
Cethana	Mersey-Forth	1971	85,000
Paloona	Mersey-Forth	1971	28,000
Fisher	Mersey-Forth	1971	43,200
Gordon River, Stage 1	Gordon/Serpentine/Huon	1975	240,000

(*a*) Actual till 1968; planned dates for subsequent years. (*b*) Discharge from Poatina enters South Esk via tributaries.

The number of ultimate consumers at 30 June 1968 was 139,886.

New capacity

The Hydro-Electric Commission is engaged on a construction programme comprising the Mersey-Forth Power Development, Gordon River Power Development, Stage 1, and Bell Bay Thermal Power Station.

The Mersey-Forth Power Development is scheduled to be completed progressively between 1968 and 1971. The essence of this development is the diversion of the flows of the Mersey and Wilmot Rivers and tributaries into the Forth River and the construction of Forth River dams. These diverted flows will be used for power generation at seven distinct power stations. The Mersey-Forth Project will add a total of 308,250 kW to the system. The first stage of the Gordon River Power Development involves the construction of a dam and a power station with a proposed instalment of 240,000 kilowatt capacity with provision for an increase to 320,000 kilowatts. An oil-fired thermal station with a single 120,000 kilowatt generator, to be built at Bell Bay on the River Tamar, is scheduled for completion by August 1970.

The Commission is conducting extensive surveys and investigation of other schemes with a view to further construction after the completion of the present programme. Investigations are continuing into the very considerable resources as yet untouched, principally in the west and south-west of the State, and it is estimated that the potential which can be developed economically should ultimately harness 2,400,000 kW to the system.

Statistical summary

The following table shows statistics for each State and Territory separately and for Australia for the year 1967–68. Statistics of the electricity supply industry for the years 1963–64 to 1967–68 are given in the chapter Manufacturing Industry. Particulars of the Snowy Mountains scheme are included under New South Wales in the following table.

CENTRAL ELECTRIC STATIONS: STATES AND TERRITORIES, 1967-68

		N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Generating stations—										
Government .	. No.	28	12	. .	13	12	19	5	. .	89
Local authority .	,,	8	3	42	7	35	. .	. .	. .	95
Companies . .	,,	14	1	1	8	42	2	. .	. .	68
Total stations .	,,	*50*	*16*	*43*	*28*	*89*	*21*	*5*	. .	*252*
Installed capacity of generators—										
Steam .	'000 kW	3,768	2,292	1,220	797	514	10	47	. .	8,647
Hydro .	,,	1,751	333	135	. .	2	915	. .	. .	3,136
Internal combustion	,,	81	20	(*a*)52	14	158	34	11	. .	370
Total capacity .	,,	*5,600*	*2,644*	*1,407*	*811*	*675*	*958*	*58*	. .	*12,153*
Persons employed(*b*) .	No.	4,141	3,654	1,893	(*g*)	1,255	(*g*)	105	. .	12,999
Value of output(*c*) .	$'000	153,078	101,380	55,347	(*g*)	31,040	(*g*)	2,531	. .	386,132
Value of production(*d*)	,,	112,955	72,259	28,514	(*g*)	18,231	(*g*)	1,320	. .	263,018
Electricity generated(*e*)	million kWh	18,043	11,419	5,189	3,890	2,216	3,773	122	(*h*)	44,663
Ultimate consumers(*f*)	No.	1,470,761	1,173,110	528,000	408,000	238,252	139,886	8,556	33,286	3,999,851

(*a*) Including gas turbine. (*b*) Average employment in generating stations over whole year, including working proprietors. (*c*) Value, at generating station, of electricity produced plus certain earnings. (*d*) Value added in the process of generation. (*e*) Total generated including that generated by factories for their own use. The generation of electricity within each State takes no account of interchange of electricity between States. Furthermore, Victorian details exclude entitlements to generation from Hume Power Station and the Snowy Mountains Hydro-electric Scheme. (*f*) Approximate figures supplied by the electricity authority in each State. An 'ultimate consumer' is a person, business, undertaking, etc. that has contracted to receive electric power from a public or private organisation supplying this service. The number of ultimate consumers is not identical with the number of persons served with electricity because one ultimate consumer may represent three or four persons, e.g. in a household. (*g*) Not available for publication; included in the total for Australia. (*h*) Not available. Excluded from Australian total.

Commonwealth Territories

The electricity supply undertakings at Canberra in the Australian Capital Territory and at Darwin, Katherine, Tennant Creek, and Alice Springs in the Northern Territory are operated by the Commonwealth Government.

Australian Capital Territory

The supply authority is the A.C.T. Electricity Authority, which took over the functions of the Canberra Electric Supply Branch, Department of the Interior, on 1 July 1963. Supply was first made available in Canberra during 1915 and was met from local steam plant. Connection to the New South Wales interconnected system was effected in 1929, and all requirements are now taken from this system. Locally owned plant consists of 4,000 kW of diesel alternators which are retained as a standby for essential supplies. The total number of ultimate consumers at 30 June 1968 was 33,268. During the year 1967–68 the bulk electricity purchased was 403,458,000 kWh and the system maximum demand was 107,450 kW.

Northern Territory

At Darwin, supply was established by the Town Council in October 1934, but during April 1937 responsibility for generation and supply was transferred to the Northern Territory Administration. The Stokes Hill Power Station is now equipped with four turbo alternators with a total capacity of 47,000 kW. Old Diesel Power Station with a capacity of approximately 5,000 kW is available as a stand-by. A 66kV transmission system is used in Darwin area. At Alice Springs the power station is equipped with a diesel generating plant of 8,000 kW total capacity. At Katherine the power station is equipped with a diesel generating plant of 2,700 kW total capacity while at Pine Creek and Elliot power is supplied by a small automatic diesel alternator of 90 kW capacity. The total number of ultimate consumers served in the Territory at 30 June 1968 was 8,556.

Papua and New Guinea

Papua and New Guinea Electricity Commission. Responsibility for the operation and establishment of the electrical undertakings in Papua and New Guinea is vested in the Papua and New Guinea Electricity Commission, whose headquarters are located at Port Moresby. The Commission came into operation on 1 July 1963, and assumed the functions and responsibilities previously vested in the Electrical Undertakings Branch of the Department of Public Works. The Commission, on its own behalf, operates the public supplies in the main centres of population and, on behalf of the Administration, operates the supply in the minor centres and patrol posts, hospitals, agricultural establishments, etc., where the supply cannot be considered to be a fully commercial supply. It has also regulatory functions associated with the licensing of electricians and contractors, the control of franchise holders and the approval of appliances and electrical materials for use in the Territory.

Generating facilities. The Electricity Commission owns and operates thermal and hydro-electric facilities at Port Moresby and Goroka and thermal facilities at Lae, Madang, Samarai, Wewak, Rabaul, Kavieng and Kokopo, with a total installed capacity of 34.2 MW at 30 June 1968.

	Hydro kW	*Thermal* kW	*Total* kW
Port Moresby	23,500	..	23,500
Lae	..	2,700	2,700
Madang	..	1,720	1,720
Goroka	400	750	1,150
Wewak	..	1,360	1,360
Rabaul	..	3,000	3,000
Kavieng, Kokopo, Samarai	..	790	790
Total	**23,900**	**10,320**	**34,220**

In addition, the Commission purchases bulk power from the hydro-electric power stations of Placer Development Ltd for consumption in the township of Lae. The Commission also owns and operates the distributing systems in these centres. The total substation capacity of all the systems combined amounts to approximately 60,500 kVa divided up in 403 stations. The Commission maintains the generating plant and distribution systems in all minor centres, acting as an agent of, and from funds provided by, the Administration. In the financial year 1967–68, 126 centres with a total installed capacity of approximately 6.0 MW were supplied with power. The townships of Wau and Bulolo are supplied exclusively with power generated by Placer Development Ltd. The number of consumers served by the Commission at 30 June 1968 was 12,786.

Future Development. Numbers 4 and 5 generators are at present being installed at the Rouna No. 2 Power Station, These are expected to be completed by mid 1969 bringing the Rouna No. 2 Power Station to its full planned capacity of 30 MW. Tenders are now being called for the raising of the Sirinumu Dam which is planned for completion in December 1970. This will ensure adequate water for the full output of the Rouna No. 2 Power Station and provide potential for further development of the Laloki River to supply Port Moresby.

Investigations have been completed on the proposed hydro-electric development of the Upper Ramu River, and recommendations have been submitted by the Administration to the Commonwealth Government. The recommendations include proposals to build a station designed for an ultimate installed capacity of 72,000 kW for a regional supply to Lae, Madang, Kainantu, Goroka, and Mount Hagen. Some 400 miles of 66 kV and 132 kV transmission line will be required to bring power to the centres of consumption.

Pending construction of the Upper Ramu hydro-electric scheme the diesel power stations at Lae, Madang, Goroka, and Mt Hagen are being extended. One 1,340 kW set is at present being installed at Madang and will be completed in May 1969. Three 2,400 kW sets have been ordered for Lae and two 400 kW sets for Goroka. A 5,000 kW hydro-electric scheme is being investigated for Mt Hagen for supply prior to the commissioning of the Upper Ramu scheme.

Investigations have commenced in determining the next stage in developing supply to Port Moresby. Besides further development of the Laloki River, the potential of the Musa, Angabunga, and Vanapa Rivers are being examined. The feasibility of connecting Port Moresby with the future Upper Ramu scheme is also being considered. Several small hydro-electric schemes for remote centres are being investigated. These include a 160 kW scheme for Finschhafen and a 200 kW scheme for Wabag.

An additional 1,200 kW diesel set was commissioned at the Rabaul Station in January 1969 and negotiations are proceeding for the installation of a second similar set. The development of a 20 MW hydro-electric scheme on the lower Warangai River has proved uneconomical for supplying the Gazelle Peninsula.

CHAPTER 28

EMPLOYMENT AND UNEMPLOYMENT

Further detail on subjects dealt with in this chapter is contained in the *Labour Report* and other publications of this Bureau. For subjects relating to population censuses reference should be made to the series of mimeographed and printed publications listed in the chapter Miscellaneous of this Year Book. Detailed information on employment and unemployment and the Labour Force Survey is contained in mimeographed bulletin *The Labour Force*. Current information is also available in the *Monthly Review of Business Statistics*, the *Digest of Current Economic Statistics*, and the *Quarterly Summary of Australian Statistics*, and preliminary estimates of civilian employment are issued in a monthly statement *Wage and Salary Earners in Civilian Employment*.

THE LABOUR FORCE

The labour force comprises two categories of persons: those who are employed and those who are unemployed. In the first category are included employers, self-employed persons, wage and salary earners, and unpaid helpers. Comprehensive details for each State and Territory and for Australia as a whole in respect of persons in the labour force, classified according to characteristics such as age, sex, marital status, industry, occupational status, and occupation are obtained only at a general census of population. Quarterly estimates of the civilian labour force are derived from the results of surveys of a sample of households selected by area sampling methods. A summary of the information about the labour force that was obtained at the population census of June 1966 is given on pages 1116–24.

Population censuses*

At the 1961 and previous censuses the labour force† was determined as:

> 'Those who are engaged in an industry, business, profession, trade or service at the time of the Census (including those on long service leave, etc.) . . . '; and
>
> ' . . . those out of a job at time of the Census but who are usually engaged in an industry, business, profession, trade or service . . . '

At the 1966 census an additional set of four questions was asked in order to obtain information on the basis of which the labour force could be determined more precisely. The *questions* were as follows.

16. 'Did the person have a job or business of any kind last week (even though he may have been temporarily absent from it)? ANSWER "YES" or "NO".'
17. 'Did the person do any work at all last week for payment or profit? ANSWER "YES" or "NO". Persons working without pay as a helper in a "family business" or farm and members of the clergy and of religious orders (other than purely contemplative orders) should answer "YES" to this question. Persons doing only unpaid housework should answer "NO".'
18. 'Was the person temporarily laid off by his employer without pay for the whole of last week? ANSWER "YES" or "NO".'
19. 'Did the person look for work last week? ANSWER "YES" or "NO". (*Note*. "Looking for work" means (i) being registered with Commonwealth Employment Service, or (ii) approaching prospective employers, or (iii) placing or answering advertisements, or (iv) writing letters of application, or (v) awaiting the result of recent applications).'

The labour force includes all persons for whom the answer 'yes' was given to any one of these four questions, except that persons helping but not receiving wages or a salary who usually worked less than fifteen hours a week were excluded from the labour force. Persons under fifteen years of age were also excluded by definition from the labour force.

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* Particulars of Aborigines are not included in the tables in this section. *See* page 117, Chapter 7, Population. † The term 'work force' has been used in 1961 and 1966 census publications and has the same meaning as the term 'labour force' recently adopted.

Persons in the labour force were classified into two categories: those employed and those unemployed. A person was considered to be unemployed if he answered the above questions in any one of the following ways.

Question No.	*In labour force—Unemployed*				
16.	No	No	No	Yes	Yes
17.	No	No	No	No	No
18.	No	Yes	Yes	Yes	Yes
19.	Yes	No	Yes	No	Yes

This approach conforms closely to the recommendations of the Eighth International Conference of Labour Statisticians held in Geneva in 1954.

The net effect of the new definition is to include approximately 108,000 additional persons in the Australian labour force, i.e. a proportionate increase in the Australian labour force of approximately 2.3 per cent. The major factor in this change was females working part-time (sometimes for only a few hours a week) some of whom, in 1961, did not consider themselves as '. . . engaged in an industry, business, profession, trade or service.'

Occupational status

Persons in the labour force were asked at the 1966 census to state occupational status in accordance with the following instructions.

'If working for wages or salary (including apprentices), write "W".

If conducting own business or profession and not at present employing others, write "O".

If conducting own business or profession and at present employing others, write "E".

If helping but not receiving wages or salary, write "H".

If looking for first job, write "F".'

The table following shows the occupational status of the population of Australia at the 1966 census.

POPULATION, BY OCCUPATIONAL STATUS: AUSTRALIA CENSUS, 30 JUNE 1966

Occupational status	*Males*	*Females*	*Persons*
In labour force—			
Employed—			
Employer	250,391	60,221	310,612
Self-employed	315,808	68,419	384,227
Employee on wage or salary	2,797,118	1,241,442	4,038,560
Helper, unpaid	13,048	32,317	45,365
Total employed	3,376,365	1,402,399	4,778,764
Unemployed	45,449	32,242	77,691
Total in labour force	*3,421,814*	*1,434,641*	*4,856,455*
Not in labour force—			
Child not at school	611,590	581,429	1,193,019
Child attending school or full-time student	1,315,221	1,223,726	2,538,947
Mainly dependent on pension or superannuation	296,756	460,858	757,614
Of independent means	50,800	56,619	107,419
Home duties	. .	1,873,146	1,873,146
Inmates of institutions	39,333	41,921	81,254
Other not in labour force	80,845	61,763	142,608
Total not in labour force	*2,394,545*	*4,299,462*	*6,694,007*
Grand total	**5,816,359**	**5,734,103**	**11,550,462**

Occupation and industry

The working population may be classified according to distinct concepts: (i) the *occupation*, which is personal to the individual, and (ii) the *industry*, in which the individual carries on his occupation. Thus the occupation of a person is the kind of work that he or she personally performs, while industry is defined as any single branch of productive activity, trade, or service.

The precise classification of persons in the labour force according to occupation and industry is extremely difficult, but continuing efforts are made to improve the quality of the data from census to census. Consequently, the comparison of data compiled at the 1966 census with that obtained at previous censuses is influenced not only by changes in the definition and content of the labour force, but also by the different responses which may have been evoked by efforts to improve the questions on the census schedule, and by some changes in coding rules designed to rectify known deficiencies in the data. Classification according to occupation and industry is difficult mainly because of the problem of conveying through a printed form the exact nature of the information required (e.g. the conceptual difference between 'occupation' and 'industry') and the consequential inadequacy of many replies.

Classification according to occupation is particularly difficult because: (*a*) the range of occupations is so extensive; (*b*) there is lack of uniformity in occupational terms, which vary between industries, locations, and States; and (*c*) respondents fail to give precise descriptions, especially of other members of their family, either through carelessness or ignorance of occupational designations. Classification according to industry is complicated by the development of new fields of industrial enterprise and the splitting and overlapping of previously identifiable fields.

It is proposed to undertake a detailed analysis of the industry information obtained at the 1966 census to evaluate the precision of the data and as an aid to the framing of classifications and the wording of instructions for the 1971 census.

Industry

At the 1966 census persons in the labour force were asked to state industry in accordance with the following instructions.

> 'State the exact branch of industry, business or service in which mainly engaged last week, using two or more words where possible. For example, "Dairy Farming", "Coal Mining", "Woollen Mills", "Retail Grocery", "Road Construction", etc. Employees should state the industry of their employer. For example, a carpenter employed by a coal mining company should state "Coal Mining". If employed by a Government Department or other public body, state also its name. For paid housekeepers and domestic servants in private households, write "P.H.".'

From the answers to this question, persons were classified according to the Bureau's *Classification of Industries*, which provides for each person to be classified according to the nature of the business in which mainly engaged, regardless of whether operated by a government authority, corporation, or individual.

POPULATION, BY INDUSTRY: AUSTRALIA, CENSUS, 30 JUNE 1966

Industry group and sub-group	*Males*	*Females*	*Persons*
Primary production—			
Fishing	7,719	302	8,021
Hunting and trapping	1,032	46	1,078
Rural industries	359,359	74,701	434,060
Forestry	13,232	260	13,492
Total, primary production	*381,342*	*75,309*	*456,651*
Mining and quarrying—			
Mining (including opencut mining)	47,419	1,972	49,391
Quarrying	6,608	344	6,952
Total, mining and quarrying	*54,027*	*2,316*	*56,343*

POPULATION, BY INDUSTRY: AUSTRALIA, CENSUS, 30 JUNE 1966—*continued*

Industry group and sub-group	*Males*	*Females*	*Persons*
Manufacturing—			
Manufacture relating to cement, bricks, glass and stone	48,570	5,342	53,912
Manufacture of products of petroleum and coal (excluding chemical and gas works)	7,546	551	8,097
Founding, engineering and metalworking	328,649	65,428	394,077
Manufacture, assembly and repair of ships, vehicles, parts and accessories	162,184	14,523	176,707
Manufacture of yarns, textiles and articles thereof (excluding clothing and furnishing drapery)	30,963	27,212	58,175
Manufacture of clothing and knitted goods (including needle-working)	19,281	77,650	96,931
Manufacture of boots, shoes and accessories (other than rubber or plastic)	12,295	11,464	23,759
Manufacture of food, drink and tobacco	133,343	43,614	176,957
Sawmilling and manufacture of wood products (other than furniture)	46,635	3,658	50,293
Manufacture of furniture and fittings (other than metal), bedding and furnishing drapery	24,272	5,272	29,544
Manufacture of paper and paper products, printing, packaging, bookbinding and photography	75,769	29,502	105,271
Manufacture of chemicals, dyes, explosives, paints and non-mineral oils	42,426	14,468	56,894
Manufacture of jewellery, watchmaking, electroplating and minting	6,868	1,939	8,807
Preparation of skins and leather; manufacture of goods of leather and leather substitutes (other than clothing or footwear)	6,153	3,019	9,172
Manufacture of rubber goods	18,896	4,961	23,857
Manufacture of musical, surgical and scientific instruments and apparatus	6,166	2,799	8,965
Manufacture of plastic products (n.e.i.)	9,711	5,733	15,444
Other manufacturing	7,023	4,679	11,702
Manufacturing undefined	1,827	1,734	3,561
Total, manufacturing	*988,577*	*323,548*	*1,312,125*
Electricity, gas, water and sanitary services (production, supply and maintenance)—			
Gas and electricity	66,995	5,584	72,579
Water supply, sewerage, etc.	31,920	1,537	33,457
Total, electricity, gas, water and sanitary services	*98,915*	*7,121*	*106,036*
Building and construction—			
Construction and repair of buildings	264,619	12,024	276,643
Construction works (other than buildings)	148,959	3,027	151,986
Total, building and construction	*413,578*	*15,051*	*428,629*
Transport and storage—			
Road transport	117,080	11,974	129,054
Shipping	23,187	2,387	25,574
Loading and discharging vessels	25,367	367	25,734
Rail and air transport	84,863	10,230	95,093
Other transport	47	7	54
Storage	2,279	299	2,578
Total, transport and storage	*252,823*	*25,264*	*278,087*
Communication	80,460	23,189	103,649
Finance and property—			
Banking	48,481	27,139	75,620
Insurance	30,831	25,669	56,500
Other finance and property	28,050	20,051	48,101
Total, finance and property	*107,362*	*72,859*	*180,221*

POPULATION, BY INDUSTRY: AUSTRALIA, CENSUS, 30 JUNE 1966—*continued*

Industry group and sub-group	*Males*	*Females*	*Persons*
Commerce—			
Wholesale trade	169,049	60,194	229,243
Livestock and primary produce dealing, etc.	27,021	6,654	33,675
Retail trade	283,422	239,518	522,940
Total, commerce	*479,492*	*306,366*	*785,858*
Public authority (n.e.i.) and defence services—			
Public authority activities (n.e.i.)	96,848	40,794	137,642
Defence: enlisted personnel	54,833	2,460	57,293
Defence: civilian employees	11,730	3,388	15,118
Total, public authority (n.e.i.) and defence services	*163,411*	*46,642*	*210,053*
Community and business services (including professional)—			
Law, order and public safety	39,144	16,103	55,247
Religion and social welfare	17,768	18,774	36,542
Health, hospitals, etc.	50,682	141,739	192,421
Education	81,286	109,386	190,672
Other community and business services (including professional)	42,085	30,015	72,100
Total, community and business services	*230,965*	*316,017*	*546,982*
Amusement, hotels and other accommodation, cafes, personal service, etc.—			
Amusement, sport and recreation	36,718	18,119	54,837
Private domestic service	5,789	27,829	33,618
Hotels, boarding houses and other accommodation and restaurants	54,209	83,086	137,295
Other personal services	28,986	40,133	69,119
Total, amusement, hotels and other accommodation, cafes, personal service, etc.	*125,702*	*169,167*	*294,869*
Other industries	92	35	127
Industry inadequately described or not stated	45,068	51,757	96,825
Total in labour force	*3,421,814*	*1,434,641*	*4,856,455*
Not in labour force	2,394,545	4,299,462	6,694,007
Grand total	**5,816,359**	**5,734,103**	**11,550,462**

PROPORTION OF THE LABOUR FORCE IN EACH INDUSTRY GROUP: AUSTRALIA CENSUS, 30 JUNE 1966

(Per cent)

Industry (major group)	*Males*	*Females*	*Persons*
Primary production	11.14	5.25	9.40
Mining and quarrying	1.58	0.16	1.16
Manufacturing	28.89	22.55	27.02
Electricity, gas, water and sanitary services (production, supply and maintenance)	2.89	0.50	2.18
Building and construction	12.09	1.05	8.83
Transport and storage	7.39	1.76	5.73
Communication	2.35	1.62	2.13
Finance and property	3.14	5.08	3.71
Commerce	14.01	21.35	16.18
Public authority (n.e.i.) and defence services	4.78	3.25	4.33
Community and business services (including professional)	6.75	22.03	11.26
Amusement, hotels and other accommodation, cafes, personal service, etc.	3.67	11.79	6.07
Other industries	0.00	0.00	0.00
Industry inadequately described or not stated	1.32	3.61	1.99
Total labour force	**100.00**	**100.00**	**100.00**

Industry and occupational status

Males and females in the labour force at the 1966 census are classified in the following table according to industry and occupational status. Only the major industry groups are shown; particulars for each sub-group are available in the mimeographed 1966 Census Bulletin No. 9.6, *Population: By Industry and Occupational Status, Australia* and in the corresponding bulletin for each State and Territory.

LABOUR FORCE, BY INDUSTRY AND OCCUPATIONAL STATUS: AUSTRALIA, CENSUS 30 JUNE 1966

Industry (major group)	*Employed*						
	Employer	*Self-employed*	*Employee (on wage or salary)*	*Helper (not on wage or salary)*	*Total*	*Un-employed*	*Total in the labour force*
MALES							
Primary production	74,684	156,171	138,337	8,085	377,277	4,065	381,342
Mining and quarrying	500	1,600	51,424	66	53,590	437	54,027
Manufacturing	26,073	20,629	934,120	820	981,642	6,935	988,577
Electricity, gas, water and sanitary services (production, supply and maintenance)	275	232	97,968	75	98,550	365	98,915
Building and construction	33,649	39,479	334,191	447	407,766	5,812	413,578
Transport and storage	11,906	25,700	213,040	251	250,897	1,926	252,823
Communication	..	5	80,163	46	80,214	246	80,460
Finance and property	4,358	6,633	95,895	142	107,028	334	107,362
Commerce	56,144	39,978	379,170	957	476,249	3,243	479,492
Public authority (n.e.i.) and defence services	..	..	162,990	3	162,993	418	163,411
Community and business services (including professional)	22,658	7,734	198,531	1,223	230,146	819	230,965
Amusement, hotels and other accommodation, cafes, personal service, etc.	19,374	16,289	88,029	552	124,244	1,458	125,702
Other industries	6	15	67	..	88	4	92
Industry inadequately described or not stated	764	1,343	23,193	381	25,681	19,387	45,068
Total males in labour force	**250,391**	**315,808**	**2,797,118**	**13,048**	**3,376,365**	**45,449**	**3,421,814**
FEMALES							
Primary production	12,747	21,747	24,274	16,108	74,876	433	75,309
Mining and quarrying	40	54	2,193	19	2,306	10	2,316
Manufacturing	5,333	5,056	308,952	1,151	320,492	3,056	323,548
Electricity, gas, water and sanitary services (production, supply and maintenance)	31	10	7,039	10	7,090	31	7,121
Building and construction	2,296	846	11,253	566	14,961	90	15,051
Transport and storage	1,431	1,321	21,878	468	25,098	166	25,264
Communication	2	4	22,957	49	23,012	177	23,189
Finance and property	674	1,474	70,125	225	72,498	361	72,859
Commerce	21,367	20,330	257,748	4,332	303,777	2,589	306,366
Public authority (n.e.i.) and defence services	..	..	46,365	4	46,369	273	46,642
Community and business services (including professional)	2,929	5,389	301,888	3,236	313,442	2,575	316,017
Amusement, hotels and other accommodation, cafes, personal service, etc.	12,835	11,067	139,833	3,001	166,736	2,431	169,167
Other industries	..	2	26	..	28	7	35
Industry inadequately described or not stated	536	1,119	26,911	3,148	31,714	20,043	51,757
Total females in labour force	**60,221**	**68,419**	**1,241,442**	**32,317**	**1,402,399**	**32,242**	**1,434,641**
PERSONS							
Primary production	87,431	177,918	162,611	24,193	452,153	4,498	456,651
Mining and quarrying	540	1,654	53,617	85	55,896	447	56,343
Manufacturing	31,406	25,685	1,243,072	1,971	1,302,134	9,991	1,312,125
Electricity, gas, water and sanitary services (production, supply and maintenance)	306	242	105,007	85	105,640	396	106,036
Building and construction	35,945	40,325	345,444	1,013	422,727	5,902	428,629
Transport and storage	13,337	27,021	234,918	719	275,995	2,092	278,087
Communication	2	9	103,120	95	103,226	423	103,649
Finance and property	5,032	8,107	166,020	367	179,526	695	180,221
Commerce	77,511	60,308	636,918	5,289	780,026	5,832	785,858
Public authority (n.e.i.) and defence services	..	..	209,355	7	209,362	691	210,053
Community and business services (including professional)	25,587	13,123	500,419	4,459	543,588	3,394	546,982
Amusement, hotels and other accommodation, cafes, personal service, etc.	32,209	27,356	227,862	3,553	290,980	3,889	294,869
Other industries	6	17	93	..	116	11	127
Industry inadequately described or not stated	1,300	2,462	50,104	3,529	57,395	39,430	96,825
Total persons in labour force	**310,612**	**384,227**	**4,038,560**	**45,365**	**4,778,764**	**77,691**	**4,856,455**

Occupation

At the 1966 Census persons in the labour force were asked to state occupation in accordance with the following instructions.

> 'State in precise (or award) terms the person's main occupation last week, using where possible two or more words. For example, "Builder's Labourer", "Dairy Farm Hand", "Clothing Machinist", "Wood Machinist", "Motor Mechanic", "Electrical Fitter", "Coal Wheeler", "Dairy Farmer", etc. Employees of Government Departments or Authorities should be described by their official designation, such as "District Employment Officer", "Shire Clerk", etc., and not by such terms as "Public Servant", etc.'

POPULATION, BY OCCUPATION: AUSTRALIA, CENSUS, 30 JUNE 1966

Occupation major group and minor group	*Males*	*Females*	*Persons*
Professional, technical and related workers—			
Architects, engineers and surveyors	31,560	197	31,757
Chemists, physicists, geologists and other physical scientists	9,230	902	10,132
Biologists, veterinarians, agronomists and related scientists	4,178	384	4,562
Medical practitioners and dentists	15,491	1,673	17,164
Nurses	4,563	72,674	77,237
Professional medical workers, n.e.c.	8,744	5,700	14,444
Teachers	59,325	75,591	134,916
Clergy and related members of religious orders	12,573	3,767	16,340
Law professionals	7,694	377	8,071
Artists, entertainers, writers and related workers	16,964	8,881	25,845
Draftsmen and technicians, n.e.c.	58,981	11,088	70,069
Other professional, technical and related workers	31,901	8,137	40,038
Total professional, etc., workers	*261,204*	*189,371*	*450,575*
Administrative, executive and managerial workers—			
Administrators and executive officials, government, n.e.c.	11,952	175	12,127
Employers, workers on own account, directors, managers, n.e.c.	256,115	36,397	292,512
Total administrative, etc., workers	*268,067*	*36,572*	*304,639*
Clerical workers—			
Book-keepers and cashiers	35,994	35,327	71,321
Stenographers and typists	..	162,806	162,806
Other clerical workers	249,295	230,126	479,421
Total clerical workers	*285,289*	*428,259*	*713,548*
Sales workers—			
Insurance, real estate salesmen, auctioneers and valuers	22,079	1,515	23,594
Commercial travellers and manufacturers' agents	47,239	1,514	48,753
Proprietors and shopkeepers working on own account, n.e.c., retail and wholesale trade, salesmen, shop assistants and related workers	126,967	176,153	303,120
Total sales workers	*196,285*	*179,182*	*375,467*
Farmers, fishermen, hunters, timber getters and related workers—			
Farmers and farm managers	240,876	31,419	272,295
Farm workers, including farm foremen, n.e.c.	134,084	39,522	173,606
Wool classers	2,406	..	2,406
Hunters and trappers	1,185	..	1,185
Fishermen and related workers	7,190	172	7,362
Timber getters and other forestry workers	12,135	62	12,197
Total farmers, fishermen, etc.	*397,876*	*71,175*	*469,051*
Miners, quarrymen and related workers—			
Miners and quarrymen	27,744	48	27,792
Well drillers and related workers	1,656	..	1,656
Mineral treaters	2,416	..	2,416
Total miners, quarrymen, etc.	*31,816*	*48*	*31,864*

POPULATION, BY OCCUPATION: AUSTRALIA, CENSUS, 30 JUNE 1966—*continued*

Occupation major group and minor group	*Males*	*Females*	*Persons*
Workers in transport and communication occupations—			
Deck officers, engineer officers and pilots, ship	4,164	8	4,172
Deck and engine room hands, ship, barge, crews and boatmen	9,723	24	9,747
Aircraft pilots, navigators and flight engineers	2,664	24	2,688
Drivers and firemen, railway	13,629	..	13,629
Drivers, road transport	166,889	3,186	170,075
Guards and conductors, railway	4,290	..	4,290
Inspectors, supervisors, traffic controllers and despatchers, transport	21,692	963	22,655
Telephone, telegraph and related telecommunication operators	3,513	23,808	27,321
Postmasters, postmen and messengers	24,811	4,768	29,579
Workers in transport and communication occupations, n.e.c.	8,666	1,287	9,953
Total workers in transport, etc.	*260,041*	*34,068*	*294,109*
Craftsmen, production-process workers and labourers, n.e.c.—			
Spinners, weavers, knitters, dyers and related workers	17,595	21,694	39,289
Tailors, cutters, furriers and related workers	18,611	76,614	95,225
Leather cutters, lasters and sewers (except gloves and garments) and related workers	12,072	11,235	23,307
Furnacemen, rollers, drawers, moulders and related metal making and treating workers	19,834	..	19,834
Precision instrument makers, watchmakers, jewellers and related workers	15,638	812	16,450
Toolmakers, machinists, plumbers, welders, platers and related workers	368,084	2,990	371,074
Electricians and related electric and electronics workers	116,593	1,328	117,921
Metal makers, metal workers and electrical production-process workers, n.e.c.	63,271	33,054	96,325
Carpenters, joiners, cabinetmakers and related workers	136,487	2,075	138,562
Painters and decorators	50,791	673	51,464
Bricklayers, plasterers and construction workers, n.e.c.	88,965	150	89,115
Compositors, pressmen, engravers, bookbinders and related workers	33,404	8,278	41,682
Potters, kilnmen, glass and clay formers and related workers	10,953	1,716	12,669
Millers, bakers, brewmasters and related food and beverage workers	85,048	17,757	102,805
Chemical and related process workers	20,471	4,556	25,027
Tobacco preparers and tobacco product makers	945	1,397	2,342
Craftsmen and production-process workers, n.e.c.	28,668	16,663	45,331
Packers, labellers and related workers	9,896	20,882	30,778
Stationary engine, excavating, lifting equipment operators and related workers	69,748	197	69,945
Freight handlers, including waterside workers	103,243	2,659	105,902
Labourers, n.e.c.	224,912	3,379	228,291
Total craftsmen, etc.	*1,495,229*	*228,109*	*1,723,338*
Service, sport and recreation workers—			
Fire brigade men, policemen, protective service and related workers	36,205	609	36,814
Housekeepers, cooks, maids and related workers	17,722	104,186	121,908
Waiters, bartenders	13,887	28,089	41,976
Building caretakers, cleaners	30,950	32,371	63,321
Barbers, hairdressers, beauticians and related workers	9,690	20,215	29,905
Launderers, dry cleaners and pressers	6,488	13,912	20,400
Athletes, sportsmen and related workers	3,317	503	3,820
Photographers and related camera operators	3,264	892	4,156
Embalmers and undertakers	898	46	944
Service, sport, recreation workers, n.e.c.	18,467	19,267	37,734
Total service, sport, etc., workers	*140,888*	*220,090*	*360,978*
Members of armed services	54,833	2,460	57,293
Occupation inadequately described or not stated	30,286	45,307	75,593
Total in labour force	*3,421,814*	*1,434,641*	*4,856,455*
Not in labour force	2,394,545	4,299,462	6,694,007
Grand total	**5,816,359**	**5,734,103**	**11,550,462**

PROPORTION OF THE LABOUR FORCE IN EACH OCCUPATION GROUP: AUSTRALIA CENSUS, 30 JUNE 1966

(Per cent)

Occupation (major group)	*Males*	*Females*	*Persons*
Professional, technical and related workers	7.63	13.20	9.28
Administrative, executive and managerial workers	7.83	2.55	6.27
Clerical workers	8.34	29.85	14.69
Sales workers	5.74	12.49	7.73
Farmers, fishermen, hunters, timber getters and related workers	11.63	4.96	9.66
Miners, quarrymen and related workers	0.93	0.00	0.66
Workers in transport and communication occupations	7.60	2.37	6.06
Craftsmen, production-process workers and labourers, n.e.c.	43.70	15.90	35.49
Service, sport, and recreation workers	4.12	15.34	7.43
Members of armed services	1.60	0.17	1.18
Occupation inadequately described or not stated	0.89	3.16	1.56
Total labour force	**100.00**	**100.00**	**100.00**

Married women in the labour force

MARRIED WOMEN IN THE LABOUR FORCE, BY AGE AUSTRALIA, CENSUS, 30 JUNE 1966

Age last birthday (years)	*Number(a)*	*Proportion of married women in each age group to—*	
		Total females of that age group in the labour force	*Total married women(a) in that age group*
		per cent	per cent
15–19	12,437	3.91	29.83
20–24	92,933	37.81	37.54
25–29	83,949	67.26	26.78
30–34	83,594	78.84	27.62
35–39	108,207	82.41	32.27
40–44	117,472	81.55	34.68
45–49	94,908	76.57	32.76
50–54	71,545	68.91	27.65
55–59	41,517	57.21	21.09
60–64	16,176	44.58	11.70
65 and over	7,984	28.43	3.94
Total	730,722	50.93	27.41

(a) Includes women married but permanently separated, legally or otherwise.

The population survey

The population survey is the general title given to the household sample survey carried out in February, May, August and November of each year in all States and Territories. Emphasis in the survey is placed on the collection of data on demographic and labour force characteristics, the principal survey component being referred to as the labour force survey. The remaining part of the population survey consists of supplementary collections which are carried out from time to time in conjunction with the labour force survey.

The population survey was instituted in November 1960 in the six State capital cities, and was extended to include non-metropolitan areas in February 1964. About 38,000 households, representing one per cent of all households, are selected by area sampling methods and enumerated each quarter, the information being obtained by carefully chosen and specially trained interviewers during a four-week period on each occasion.

A description of the labour force survey and a selection of principal statistics obtained from it are given in this section. Data from supplementary surveys are published in mimeographed bulletins which are available on request (results of the surveys Leavers from Schools, Universities or Other Educational Institutions, and Multiple Jobholding, were given in Year Book No. 54, pages 1162–6). A list of the subjects covered by supplementary surveys is shown below.

Leavers from Schools, Universities or Other Education Institutions—February 1964, 1965, 1966 and 1967.
Australian Ex-Service Personnel, November 1966.
Multiple Jobholding, November 1965; August 1966; August 1967.
Superannuation, Victoria, May 1968.
Chronic Illnesses, Injuries and Impairments, May 1968.
Study Courses, August 1968.
Work Experience in 1968.
Child Care, May 1969.

The labour force survey

This survey includes all persons fifteen years of age and over (including full-blood Aborigines), except members of the permanent armed forces, national servicemen enlisted in the Regular Army Supplement and certain diplomatic personnel customarily excluded from census and estimated populations.

The classification used in the survey conforms closely to that recommended by the Eighth International Conference of Labour Statisticians held in Geneva in 1954. In this classification, the labour force category to which an individual is assigned depends on his actual activity (i.e. whether working, looking for work, etc.) during a specified week, known as 'survey week', which is the week immediately preceding that in which the interview takes place. The interviews are carried out during a period of four weeks, so that there are four survey weeks in each of the months to which the survey relates. These survey weeks generally fall within the limits of the calendar month.

A person's activity during survey week is determined from answers given to a set of questions specially designed for this purpose. The principal categories appearing in the tables in this bulletin are the employed and unemployed, who together constitute the labour force, and the remainder, who are classified as not in the labour force. Definitions of these categories are as follows:

(i) *The labour force* comprises all persons who, during survey week, were employed or unemployed as defined in (ii) and (iii) below.

(ii) *Employed persons* comprise all those who, during survey week,
  (*a*) did any work for pay, profit, commission or payment in kind, in a job or business, or on a farm (including employees, employers and self-employed persons), or
  (*b*) worked fifteen hours or more without pay in a family business (or farm), or
  (*c*) had a job, business or farm, but were not at work because of illness, accident, leave, holiday or industrial dispute; or because of production hold-up due to bad weather, plant breakdown, etc.

A person who had a job but was temporarily laid off by his employer for the whole week without pay is excluded, and is classified in the tables as unemployed. A person who did some work during the week, however, before he either lost his job or was laid off, is classified as employed. A person who held more than one job is counted only once, in the job at which he worked most hours during survey week.

(iii) *Unemployed persons* comprise all those who, during survey week, did no work at all, and who either,
  (*a*) did not have a job or business and were actively looking for work (including those who stated that they would have looked for work if they had not been temporarily ill or believed no work was available, or had not already made definite arrangements to start work in a new job after survey week), or
  (*b*) were laid off from their jobs without pay for the whole week.

A person who either lost his job or was laid off *during* survey week, but did some work at his job during that week, is classified as employed.

(iv) *Persons not in the labour force* are all those who, during survey week, were not in the categories 'employed' or 'unemployed' as defined. This category therefore includes persons without a job, business or farm who were not actively looking for work, and who, during survey week, were either keeping house (unpaid), attending school, university, etc., retired or voluntarily idle, permanently unable to work or inmates of institutions. A person who worked less than fifteen hours without pay in a family business during survey week is also classified as not in the labour force.

Figures of total population fifteen years of age and over for each sex are derived from the official population estimates, which in turn are based on the census of June 1966. Figures of marital status and all labour force characteristics of these populations are derived from the sample survey data. For this and other reasons, including differences in timing, methods of collection (personal interview in the survey, self-enumeration in the census) and, in some cases, concepts and definitions, the survey estimates of marital status and labour force characteristics for May 1966 may not agree closely with the corresponding census figures for June 1966.

Reliability of the estimates

Since the estimates which appear in the following tables are based on a sample, they may differ from the figures that would have been obtained from a complete census using the same questionnaires and procedures. One measure of the likely difference is given by the standard error, which indicates the extent to which an estimate might have varied by chance because only a sample, and not the whole population, was enumerated. There are about two chances in three that a sample estimate will differ by less than one standard error from the figure that would have been obtained from a comparable complete enumeration, and about nineteen chances in twenty that the difference will be less than two standard errors.

Space does not allow for the separate indication of the standard errors of all estimates in this section. A table of standard errors which is intended to be of general application is therefore given below (Table A), and approximate standard errors of estimates of the total number of persons in Australia in each of the principal employment status categories, classified by sex only, in Table B.

The standard errors in these tables are averages based on calculations for a limited number of surveys and are also averages over a wide range of labour force characteristics. These figures thus give not a precise measure but an indication of the magnitude of the standard error of any particular estimate for any particular survey. An example of the use of Table A is as follows: if the estimate obtained from the sample is 100,000 and the standard error is 3 per cent of the estimate, i.e. 3,000, there are about two chances in three that the true figure is within the range 97,000 to 103,000 and about nineteen chances in twenty that this figure is within the range 94,000 to 106,000.

TABLE A
STANDARD ERRORS OF QUARTERLY ESTIMATES

Size of estimate (persons)	*Approximate standard error of estimates*	
	Persons	*Percentage of estimate*
4,000	750	19
5,000	850	17
10,000	1,100	11
20,000	1,400	7
50,000	2,000	4
100,000	3,000	3
200,000	4,000	2
500,000	5,000	1
1,000,000	5,500	0.5
2,000,000	8,000	0.4

TABLE B
STANDARD ERRORS OF PRINCIPAL EMPLOYMENT STATUS CATEGORIES

Category	*Approximate standard error of estimates*					
	Males		*Females*		*Persons*	
	'000	*Per cent*	*'000*	*Per cent*	*'000*	*Per cent*
Employed—						
Agriculture	12	3.2	3	6.3	14	3.2
Other industries	8	0.3	10	0.7	12	0.3
Total	*8*	*0.2*	*10*	*0.7*	*12*	*0.3*
Unemployed	2	6.1	2	5.7	3	4.4
Labour force	7	0.2	10	0.7	12	0.3
Not in the labour force	7	1.1	10	0.4	12	0.4

It should be noted that the standard errors of estimates relating to agricultural employment are generally somewhat higher than the standard errors of other estimates of the same magnitude. Estimates for females also tend to have higher standard errors relative to estimates of equivalent size for males in similar employment categories.

The reliability of estimated percentages given in the following tables, which have been computed by using sample data for both numerator and denominator, depends upon both the size of the percentage and the size of the denominator. Percentages quoted and any other percentages calculated from figures in the following tables, have generally somewhat lower standard errors (proportionally) than have the estimates which form the numerators of the percentages, particularly where the percentages are large.

As the standard errors in Table A show, the smaller the estimate the higher is the relative standard error. Very small estimates would thus be subject to such high standard errors (relative to the size of the estimate) as to detract seriously from their value for most reasonable uses. In the following tables, estimates less than 4,000 have not been shown. Although figures for these small components can be derived by subtraction, they should not be regarded as reliable.

The imprecision due to sampling variability, which is measured by the standard error, should not be confused with inaccuracies that may occur because of imperfections in reporting by interviewers and respondents. Inaccuracies of this kind are referred to as the non-sampling error, and they may occur in any enumeration, whether it be a full count or only a sample. Every effort is made to reduce the non-sampling error to a minimum by careful design of questionnaires, intensive training and supervision of interviewers and efficient operating procedures.

CIVILIAN POPULATION 15 YEARS OF AGE AND OVER(*a*) BY EMPLOYMENT STATUS: AUSTRALIA

	Employed(b)			*Unemployed(b)*		*Total labour force(b)*			
May—	*Agriculture ('000)*	*Other industries ('000)*	*Total ('000)*	*Number ('000)*	*Per cent of labour force*	*Number ('000)*	*Per cent of population(c)*	*Not in labour force(b) ('000)*	*Civilian population aged 15 and over (a) ('000)*
MALES									
1965 .	378.5	2,907.2	3,285.7	24.5	0.7	3,310.2	83.9	633.6	3,943.8
1966 .	370.9	2,980.9	3,351.8	32.9	1.0	3,384.6	84.2	635.9	4,020.5
1967 .	369.8	3,023.6	3,393.4	40.0	1.2	3,433.4	83.6	671.2	4,104.6
1968 .	362.0	3,097.1	3,459.1	37.7	1.1	3,496.8	83.4	698.5	4,195.3
1969 .	361.9	3,182.5	3,544.4	35.4	1.0	3,579.8	83.3	715.1	4,294.9
MARRIED WOMEN									
1965 .	39.1	614.8	653.8	13.9	2.1	667.8	25.7	1,929.7	2,597.5
1966 .	40.1	659.4	699.4	16.6	2.3	716.0	27.0	1,936.8	2,652.8
1967 .	43.7	715.5	759.2	20.6	2.6	779.7	28.8	1,931.8	2,711.5
1968 .	41.2	776.6	817.7	21.6	2.6	839.3	30.2	1,940.2	2,779.6
1969 .	41.3	835.2	876.6	23.2	2.6	899.7	31.4	1,964.0	2,863.7
OTHER FEMALES(*d*)									
1965 .	15.3	658.2	673.5	17.0	2.5	690.5	50.1	688.4	1,378.9
1966 .	14.3	672.2	686.4	15.9	2.3	702.4	49.7	710.9	1,413.3
1967 .	11.9	691.2	703.1	18.2	2.5	721.3	49.6	733.0	1,454.4
1968 .	11.9	696.5	708.4	19.3	2.6	727.6	49.2	750.3	1,477.9
1969 .	11.8	689.6	701.4	16.5	2.3	717.9	48.1	774.5	1,492.4
ALL FEMALES									
1965 .	54.4	1,272.9	1,327.3	30.9	2.3	1,358.3	34.2	2,618.1	3,976.4
1966 .	54.3	1,331.6	1,385.9	32.5	2.3	1,418.4	34.9	2,647.7	4,066.1
1967 .	55.6	1,406.7	1,462.3	38.8	2.6	1,501.1	36.0	2,664.8	4,165.9
1968 .	53.1	1,473.0	1,526.1	40.9	2.6	1,567.0	36.8	2,690.5	4,257.5
1969 .	53.1	1,524.9	1,578.0	39.7	2.5	1,617.6	37.1	2,738.5	4,356.1
PERSONS									
1965 .	432.9	4,180.1	4,613.0	55.5	1.2	4,668.5	58.9	3,251.7	7,920.2
1966 .	425.2	4,312.4	4,737.6	65.4	1.4	4,803.0	59.4	3,283.6	8,086.6
1967 .	425.4	4,430.2	4,855.7	78.8	1.6	4,934.4	59.7	3,336.1	8,270.5
1968 .	415.1	4,570.1	4,985.2	78.5	1.6	5,063.7	59.9	3,389.1	8,452.8
1969 .	415.0	4,707.4	5,122.4	75.1	1.4	5,197.4	60.1	3,453.6	8,651.0

(*a*) For a note on persons excluded *see* explanatory notes on page 1125. (*b*) For definitions *see* page 1125. (*c*) The labour force in each group as a percentage of the civilian population aged 15 years and over in the same group (labour force participation rate). (*d*) Never married, widowed and divorced.

CIVILIAN LABOUR FORCE(*a*), BY AGE AND MARITAL STATUS
AUSTRALIA, MAY 1969

Age group (years)	*Married*			*Not married(b)*			*Total*		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
NUMBER ('000)									
15–19 . .	5.5	13.3	18.9	333.6	301.2	634.9	339.2	314.6	653.7
20–24 . .	163.9	135.2	299.1	303.9	176.1	480.0	467.8	311.3	779.1
25–34 . .	626.5	220.0	846.5	159.9	63.2	223.1	786.4	283.2	1,069.6
35–44 . .	679.2	258.4	937.6	84.3	47.9	132.3	763.5	306.3	1,069.8
45–54 . .	591.8	200.4	792.3	79.4	64.5	143.9	671.3	264.9	936.2
55–59 . .	234.9	50.8	285.7	33.7	29.4	63.1	268.6	80.2	348.8
60–64 . .	160.2	17.2	177.4	24.8	18.8	43.6	185.0	36.0	221.0
65 and over .	77.8	4.4	82.2	20.3	16.7	37.0	98.0	21.2	119.2
Total .	**2,539.8**	**899.7**	**3,439.5**	**1,040.0**	**717.9**	**1,757.9**	**3,579.8**	**1,617.6**	**5,197.4**
PER CENT OF POPULATION(*c*)									
15–19 . .	97.8	34.8	42.9	61.7	61.0	61.4	62.1	59.1	60.6
20–24 . .	98.7	44.2	63.4	90.3	90.1	90.2	93.1	62.1	77.6
25–34 . .	99.0	32.0	64.1	93.1	82.9	90.0	97.8	37.1	68.2
35–44 . .	98.9	38.7	69.3	89.8	72.7	82.7	97.8	41.8	70.7
45–54 . .	97.4	34.4	66.5	87.4	60.1	72.6	96.1	38.4	67.4
55–59 . .	92.2	22.7	59.6	79.5	41.0	55.3	90.4	27.1	58.8
60–64 . .	80.6	11.1	50.1	66.4	22.2	35.7	78.3	15.0	46.4
65 and over .	26.1	2.2	16.4	15.5	4.2	7.0	22.9	3.5	11.6
Total .	**89.1**	**31.4**	**60.2**	**72.0**	**48.1**	**59.9**	**83.3**	**37.1**	**60.1**

(*a*) Aged 15 years and over. For definitions *see* page 1125. (*b*) Never married, widowed and divorced. (*c*) The labour force in each group as a percentage of the civilian population in the same group.

EMPLOYED PERSONS(*a*), BY HOURS WORKED(*b*): AUSTRALIA

('000 persons)

May	*Hours worked during survey week*							*Total*	*Average hours worked(d)*
	0(c)	*1–29*	*30–34*	*35–39*	*40*	*41–48*	*49 and over*		
MALES									
1965 . .	168.4	208.1		1,815.8		507.6	585.8	3,285.7	41.4
1966 . .	175.3	129.8	101.1	209.6	1,608.8	457.1	670.2	3,351.8	41.5
1967 . .	175.4	127.5	108.4	243.3	1,624.5	462.4	651.8	3,393.4	41.2
1968 . .	188.7	142.6	111.9	256.8	1,613.8	489.6	655.7	3,459.1	41.0
1969 . .	194.1	167.5	227.3	282.8	1,474.0	504.1	694.6	3,544.4	40.8
MARRIED WOMEN									
1965 . .	42.8	209.7		321.4		33.6	46.4	653.8	32.4
1966 . .	48.0	188.7	47.4	64.7	270.6	31.5	48.6	699.4	31.7
1967 . .	50.9	203.1	54.5	76.8	291.8	35.9	46.2	759.2	31.6
1968 . .	55.9	226.8	58.4	84.7	307.2	38.8	46.0	817.7	31.1
1969 . .	63.4	256.8	85.8	95.7	286.7	41.6	46.6	876.6	30.2

For footnotes *see* next page.

EMPLOYED PERSONS(*a*), BY HOURS WORKED(*b*): AUSTRALIA—*continued*

('000 persons)

May	*Hours worked during survey week*								
	0(c)	*1–29*	*30–34*	*35–39*	*40*	*41–48*	*49 and over*	*Total*	*Average hours worked(d)*
OTHER FEMALES(*e*)									
1965 . .	41.1	87.0		469.4		51.8	24.2	673.5	35.9
1966 . .	41.2	57.2	38.8	114.2	357.2	47.4	30.4	686.4	35.9
1967 . .	42.5	59.8	36.3	130.2	358.9	45.6	29.7	703.1	35.7
1968 . .	42.8	65.8	42.6	135.7	348.2	46.7	26.6	708.4	35.2
1969 . .	41.1	68.2	53.7	141.0	325.4	48.5	23.5	701.4	34.9
ALL FEMALES									
1965 . .	83.9	296.7		790.8		85.3	70.6	1,327.3	34.2
1966 . .	89.2	245.9	86.2	178.9	627.9	78.9	79.0	1,385.9	33.7
1967 . .	93.4	262.9	90.8	207.0	650.7	81.5	75.9	1,462.3	33.5
1968 . .	98.7	292.6	100.9	220.4	655.4	85.4	72.5	1,526.1	33.0
1969 . .	104.5	325.0	139.4	236.8	612.1	90.0	70.1	1,578.0	32.3
PERSONS									
1965 . .	252.3	504.8		2,606.6		592.9	656.3	4,613.0	39.4
1966 . .	264.5	375.7	187.3	388.4	2,236.6	536.0	749.2	4,737.6	39.2
1967 . .	268.8	390.4	199.2	450.3	2,275.2	543.9	727.7	4,855.7	38.9
1968 . .	287.4	435.3	212.8	477.2	2,269.2	575.0	728.3	4,985.2	38.6
1969 . .	298.6	492.5	366.7	519.6	2,086.1	594.1	764.7	5,122.4	38.2

(*a*) Civilians 15 years of age and over. For definitions *see* page 1125. (*b*) Actual hours worked during survey week, not hours paid for. The figures may be affected by public holidays, leave, absenteeism; temporary absence from work due to sickness, accidents, and industrial disputes; and work stoppages due to bad weather, plant breakdowns, etc. (*c*) Excludes persons laid off for the whole of survey week without pay; these persons are classified as unemployed. (*d*) Persons with jobs who did not work during survey week have been included in the calculation of average hours worked. (*e*) Never married, widowed and divorced.

EMPLOYED PERSONS(*a*) WHO WORKED LESS THAN 35 HOURS(*b*) BY REASON: AUSTRALIA

('000)

	Usually work 35 hours or more				*Usually work less than 35 hours*		
	Reason for working less than 35 hours				*Reason for working less than 35 hours*		
May—	*Leave or holiday*	*Own illness or injury*	*Other reasons*	*Total*	*Lack of work*	*Other reasons*	*Total*
			MALES				
1965 . . .	155.4	83.8	22.7	261.9	6.9	107.8	114.7
1966 . . .	174.6	82.1	32.4	289.0	8.1	109.0	117.1
1967 . . .	177.5	81.6	27.5	286.6	9.3	115.5	124.8
1968 . . .	184.0	83.6	50.3	317.9	7.1	118.2	125.2
1969 . . .	205.5	86.1	(*c*)159.6	451.2	7.4	130.3	137.7
			FEMALES				
1965 . . .	58.5	29.1	4.4	91.9	10.0	278.7	288.7
1966 . . .	64.2	29.2	9.0	102.5	11.2	307.6	318.8
1967 . . .	64.0	28.7	10.4	103.1	11.3	332.6	344.0
1968 . . .	67.2	33.5	9.2	109.9	14.5	367.9	382.4
1969 . . .	78.0	37.3	(*c*)41.1	156.4	17.1	395.5	412.6
			PERSONS				
1965 . . .	213.9	112.9	27.0	353.8	16.9	386.5	403.4
1966 . . .	238.8	111.3	41.3	391.5	19.3	416.6	435.9
1967 . . .	241.5	110.3	38.0	389.7	20.7	448.1	468.8
1968 . . .	251.2	117.1	59.5	427.8	21.6	486.1	507.6
1969 . . .	283.5	123.4	(*c*)200.7	607.6	24.5	525.7	550.2

(*a*) Civilians 15 years of age and over. For definitions *see* page 1125. (*b*) *See* note (*b*) to previous table. (*c*) Affected by industrial disputes.

EMPLOYED MARRIED WOMEN(*a*), BY INDUSTRY: AUSTRALIA

('000)

May—	*Agriculture*	*Manu-facturing*	*Commerce*	*Community and business services(b)*	*Amusement, hotels, personal service*	*Other ind-ustries(c)*	*Total*
PART-TIME WORKERS(*d*)							
1965 . . .	18.5	24.6	52.6	53.2	44.7	17.7	211.1
1966 . . .	22.3	27.2	59.6	61.7	48.0	19.3	238.1
1967 . . .	23.0	32.4	59.8	68.3	56.8	19.5	259.7
1968 . . .	19.8	31.5	70.0	79.3	61.9	26.1	288.5
1969 . . .	20.7	33.5	73.1	93.4	62.9	33.6	317.2
FULL-TIME WORKERS(*e*)							
1965 . . .	20.6	160.9	109.9	58.3	57.7	35.4	442.7
1966 . . .	17.7	164.3	117.4	63.7	57.4	40.7	461.3
1967 . . .	20.7	166.9	123.0	75.6	63.5	49.6	499.4
1968 . . .	21.4	178.6	132.2	82.0	63.2	51.9	529.2
1969 . . .	20.6	192.0	135.3	91.1	60.4	59.9	559.4
TOTAL							
1965 . . .	39.1	185.5	162.4	111.5	102.3	53.0	653.8
1966 . . .	40.1	191.5	177.0	125.4	105.4	60.0	699.4
1967 . . .	43.7	199.3	182.9	144.0	120.3	69.1	759.2
1968 . . .	41.2	210.0	202.1	161.3	125.1	78.0	817.7
1969 . . .	41.3	225.5	208.4	184.5	123.3	93.6	876.6

(*a*) Civilians 15 years of age and over. For definitions *see* page 1125. (*b*) Comprising law, order and public safety; religion and social welfare; health, hospitals, etc.; education; and other community and business services (including professional). (*c*) Forestry, fishing, etc.; mining and quarrying; electricity, gas, water; building and construction; transport and storage; communication; finance and property; and public authority activities (n.e.i.). (*d*) Those who usually work less than 35 hours a week and who did so during survey week. (*e*) Those who usually work 35 hours or more and others who, although usually part-time workers, worked 35 hours or more during survey week.

UNEMPLOYED PERSONS(*a*): AUSTRALIA

	Age (years)				*Duration of unemployment(b)*				*Looking for—*		
	15–19		*20 and over*								
May—	*Number unemployed* ('000)	*Per cent of labour force*	*Number unemployed* ('000)	*Per cent of labour force*	*Under 2 weeks* ('000)	*2 and under 4 weeks* ('000)	*4 and under13 weeks* ('000)	*13 weeks and over* ('000)	*Full-time work(c)* ('000)	*Part-time work(d)* ('000)	*Tota*
					MALES						
1965 .	7.5	2.2	17.1	0.6	6.5	7.5	6.9	*	22.6	*	24.
1966 .	8.2	2.3	24.7	0.8	9.0	8.4	9.3	6.1	30.3	*	32.
1967 .	11.1	3.2	28.9	0.9	10.8	11.1	9.6	8.6	37.2	*	40.
1968 .	10.5	3.2	27.2	0.9	7.1	12.5	11.9	6.2	35.7	*	37.
1969 .	7.7	2.3	27.7	0.9	6.9	10.4	11.1	7.0	33.4	*	35.
					FEMALES						
1965 .	11.3	3.5	19.6	1.9	6.3	7.0	9.0	8.6	22.6	8.4	30.
1966 .	12.5	3.8	20.1	1.8	7.0	6.2	9.0	10.4	23.9	8.7	32.
1967 .	14.5	4.4	24.2	2.1	8.1	10.2	9.0	11.5	30.2	8.6	38.
1968 .	13.3	4.2	27.6	2.2	9.3	9.5	13.2	8.9	29.5	11.4	40.
1969 .	12.0	3.8	27.7	2.1	10.6	11.0	10.3	7.8	27.8	11.8	39.
					PERSONS						
1965 .	18.8	2.8	36.6	0.9	12.9	14.5	15.8	12.3	45.2	10.3	55.
1966 .	20.7	3.0	44.7	1.1	16.0	14.6	18.3	16.5	54.2	11.2	65.
1967 .	25.6	3.8	53.1	1.2	18.9	21.2	18.6	20.1	67.3	11.4	78.
1968 .	23.8	3.7	54.8	1.2	16.4	22.0	25.0	15.1	65.1	13.4	78.
1969 .	19.7	3.0	55.4	1.2	17.5	21.4	21.4	14.8	61.2	13.8	75.

* Estimates less than 4,000 are not published because they would be subject to sampling variability too high for mos practical purposes. Although figures for these small components can be derived, they should not be regarded as reliable

(*a*) Civilians 15 years of age and over. For definitions *see* page 1125. (*b*) Period from the time the person begar looking for work, or was laid off, to the end of survey week. (*c*) Includes persons laid off from full-time jobs. (*d*) In cludes persons laid off from part-time jobs.

WAGE AND SALARY EARNERS IN EMPLOYMENT

NOTE: *The series in this section have been revised to new benchmarks derived from the populatio census of June 1966. When this chapter was sent for press the revision had not been completed, and the old series have therefore been included in order to give an indication of employment trends. For a explanation of the differences between the new and old series see following paragraphs.*

The series contained in this section, except those relating to government employees and defenc forces, are based on comprehensive data (referred to herein as 'benchmarks') derived for the purpos from the population census of June 1961. From July 1961 to date the figures shown are estimate designed to measure month-to-month changes in the sector of employment to which the benchmark relate. Between population censuses the employment data are obtained from three main sources namely (*a*) current pay-roll tax returns; (*b*) current returns from government bodies; and (*c*) some other direct current records of employment (e.g. for hospitals). The total of recorded employment i supplemented each month by estimates of changes in the number of wage and salary earners no covered by the foregoing collections. The series relate only to wage and salary earners. They therefore exclude employers, self-employed persons and unpaid helpers. Also excluded, because of the inadequacy of current data, are employees in agriculture and in private domestic service.

Current data supplied by reporting enterprises or establishments generally refer to persons on the pay-roll for the last pay-period in each month. Persons who are on paid leave or who work durin part of the pay-period and are unemployed or on strike during the rest of the period are generall counted as employed. Those not shown on employers' pay-rolls because they are on leave without pay on strike, or stood down for the entire period are excluded.

Pay-roll tax returns are lodged at present by all employers paying more than $400 a week in wage (other than certain Commonwealth Government bodies, religious and benevolent institutions, public hospitals, and other similar organisations specifically exempted under the *Pay-roll Tax Assessmen Act* 1941–1968).

The level of the estimates in this section is affected by the exclusion of many employees from the 1961 census benchmarks (*see* below); nevertheless, they measure reasonably well the short-term trends in employment *in the defined field.* However, they may be less reliable for longer-term measurement. There are conceptual differences between benchmark and pay-roll data, and changes in such factors as labour turnover, multiple jobholding, and part-time working affect the trend over longer periods.

The benchmark figures were derived from particulars recorded for individuals on population census schedules, while the estimated monthly figures are derived mainly from reports supplied by employers, relating to enterprises or establishments. Because the two sources differ in some cases in scope and in the reporting of industry, the industry dissection of the benchmark totals was adjusted to conform as closely as possible to an enterprise-establishment reporting basis. The industry classification used throughout the series is that of the population census of June 1961.

At the 1961 population census those persons who were not stated to be engaged in an industry, business, profession, trade, or service were required to be described as students, pensioners, engaged in home duties, etc., and were automatically classified as not being in the labour force. It is believed that many persons—particularly married women—classified themselves according to their main or usual activity or status (e.g. home duties) and overlooked the part-time or casual employment that they had at the time of the census. Had the census questions been designed to obtain particulars of each person's actual activity during a specified period (as the 1966 population census labour force questions were), so that any employee who did any paid work at all, or who had a job, would have been included, these persons would have been counted in the total of employed wage and salary earners.

The scope of the current monthly series is similar to and subject to the same limitations as that of the population census benchmarks. For this reason the totals shown in this section for Australia, for States and Territories, and for industries do not necessarily represent, at any point of time, the total numbers of wage and salary earners employed full-time or part-time in those areas or industries. Instead, they represent the estimated numbers of persons who would have been counted as wage and salary earners at a population census in which the concepts and definitions were the same as those of the 1961 census. The concepts and definitions adopted at the 1966 population census conformed closely to the recommendations of the Eighth International Conference of Labour Statisticians, all persons who did any paid work for an employer or who had a job as an employee from which they were temporarily absent being classified as employed wage and salary earners. Census figures have been published in a series of mimeographed bulletins which show particulars of the occupational status and industry of the population in each State and Territory at June 1966. The figures therein for wage and salary earners classified by industry are not comparable with those in this section, because they are based on different work force concepts and definitions and on a different method of allocating persons to industries. Furthermore, the figures in this section are still based on June 1961 benchmarks.

The table below gives a comparison, at June 1966, of the estimated number of employed wage and salary earners (excluding defence forces and employees in agriculture and private domestic service), compiled on the current basis, and figures from the population census. In adjusting the census figures to exclude the categories of persons excluded from the estimates, allowance has been made for persons whose industry was either inadequately described or not stated.

WAGE AND SALARY EARNERS IN CIVILIAN EMPLOYMENT
STATES AND TERRITORIES, JUNE 1966

EXCLUDING DEFENCE FORCES AND EMPLOYEES IN AGRICULTURE AND PRIVATE DOMESTIC SERVICE

('000)

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T. (a)*	*Aust.*
Males—									
1. Estimates(*b*) . .	996.2	733.4	336.6	242.1	180.7	81.1	10.5	26.0	2,606.6
2. Population census(*c*) .	989.2	735.3	341.0	243.1	179.9	81.6	10.7	26.5	2,607.2
3. Difference (1–2) . .	*7.0*	*−1.9*	*−4.4*	*−1.0*	*0.8*	*−0.5*	*−0.2*	*−0.5*	*−0.6*
Females—									
1. Estimates(*b*) . .	426.7	328.4	128.9	97.7	68.0	29.8	3.6	13.1	1,096.2
2. Population census(*c*) .	456.3	360.8	139.5	105.9	76.0	33.7	3.9	13.2	1,189.3
3. Difference (1–2) . .	*−29.6*	*−32.4*	*−10.6*	*−8.2*	*−8.0*	*−3.9*	*−0.3*	*−0.1*	*−93.1*

(*a*) Includes persons employed in the Australian Capital Territory who reside in adjoining areas. (*b*) Based on 1961 population census benchmarks. (*c*) Not comparable with 1961 population census results; *see* above.

Total civilian employees and defence forces

WAGE AND SALARY EARNERS IN EMPLOYMENT, BY SEX: AUSTRALIA JUNE 1961 TO JUNE 1968(a)

EXCLUDING EMPLOYEES IN AGRICULTURE AND PRIVATE DOMESTIC SERVICE

('000)

	June 1961	*June 1964*	*June 1965*	*June 1966*	*June 1967*	*June 1968*
Males—						
Civilian employees—						
Private	1,594.6	1,762.3	1,834.7	1,861.5	1,878.4	1,934.6
Government(*b*)	669.7	707.0	718.4	745.1	756.9	779.8
Total	2,264.3	2,469.3	2,553.1	2,606.6	2,635.3	2,714.4
Defence forces(*c*)	44.3	49.6	52.5	64.2	74.8	78.1
Total males	*2,308.6*	*2,518.9*	*2,605.6*	*2,670.8*	*2,710.1*	*2,792.5*
Females—						
Civilian employees—						
Private	714.5	815.1	863.2	894.4	927.1	964.3
Government(*b*)	154.4	176.3	187.8	201.8	212.7	224.2
Total	868.9	991.4	1,051.0	1,096.2	1,139.8	1,188.5
Defence forces(*c*)	1.8	2.2	2.2	2.5	2.5	2.7
Total females	*870.7*	*993.6*	*1,053.2*	*1,098.7*	*1,142.3*	*1,191.2*
Persons—						
Civilian employees—						
Private	2,309.1	2,577.4	2,697.9	2,755.9	2,805.6	2,899.0
Government(*b*)	824.1	883.3	906.2	946.9	969.5	1,003.9
Total	3,133.2	3,460.7	3,604.1	3,702.8	3,775.1	3,902.9
Defence forces(*c*)	46.1	51.8	54.7	66.6	77.3	80.8
Total persons	3,179.3	3,512.5	3,658.8	3,769.4	3,852.4	3,983.7

(*a*) Figures for periods subsequent to June 1961 are being revised; *see* pages 1132–3. (*b*) Includes employees, within Australia, of government authorities (Commonwealth, State, local, and semi-government) on services such as railways, tramways, banks, post office, air transport, education (including universities), broadcasting, television, police, public works, factories and munitions establishments, departmental hospitals and institutions, migrant hostels, etc., as well as administrative employees. *See* pages 1137–8. (*c*) Permanent defence forces in Australia and overseas. From June 1966 the figures include national servicemen enlisted in the Regular Army Supplement.

Civilian employees

WAGE AND SALARY EARNERS IN CIVILIAN EMPLOYMENT BY INDUSTRY GROUP AND SEX: AUSTRALIA, JUNE 1961 TO JUNE 1968(*a*)

EXCLUDING DEFENCE FORCES AND EMPLOYEES IN AGRICULTURE AND PRIVATE DOMESTIC SERVICE

('000)

Industry group	*June 1961*	*June 1964*	*June 1965*	*June 1966*	*June 1967*	*June 1968*
MALES						
Mining and quarrying	48.2	46.4	47.7	50.3	51.4	54.0
Manufacturing(*b*)	821.6	920.9	952.2	955.2	965.9	987.1
Electricity, gas, water, and sanitary services	88.5	93.4	94.6	97.7	99.6	101.5
Building and construction	274.8	290.0	299.0	310.1	299.0	310.0
Transport and storage	190.4	192.5	197.9	201.8	201.9	206.2
Communication	75.2	78.1	79.3	81.1	84.2	87.0
Finance and property	80.4	92.1	96.9	101.7	105.4	109.3
Retail trade	191.3	210.8	215.8	216.5	218.0	222.3
Wholesale and other commerce	161.4	170.5	177.1	179.6	180.4	184.1
Public authority activities (n.e.i.)	95.0	105.7	110.1	116.5	122.5	128.2
Health, hospitals, etc.	31.0	35.3	36.2	37.2	38.4	39.7
Education	57.1	69.5	73.3	77.6	80.5	85.6
Amusement, hotels, cafés, personal service, etc.	70.1	78.2	83.2	87.9	92.0	97.7
Other(*c*)	79.3	86.0	89.9	93.5	96.2	101.9
Total	*2,264.3*	*2,469.3*	*2,553.1*	*2,606.6*	*2,635.3*	*2,714.4*
FEMALES						
Mining and quarrying	1.4	1.7	1.8	2.0	2.4	2.6
Manufacturing(*b*)	233.5	277.6	293.8	297.1	305.5	313.2
Electricity, gas, water, and sanitary services	6.2	6.5	7.0	7.4	7.4	7.6
Building and construction	4.9	5.8	6.6	7.1	7.5	8.2
Transport and storage	17.0	18.1	19.4	21.0	21.7	22.7
Communication	18.3	19.3	20.6	21.5	22.7	23.0
Finance and property	54.2	60.0	63.6	67.5	70.1	73.1
Retail trade	150.7	169.5	177.6	184.2	191.9	197.2
Wholesale and other commerce	49.2	52.1	55.5	58.1	59.0	61.1
Public authority activities (n.e.i.)	34.6	39.1	42.0	46.2	49.4	51.9
Health, hospitals, etc.	102.6	117.6	124.3	129.2	133.4	139.6
Education	73.7	87.9	92.1	98.6	104.4	112.3
Amusement, hotels, cafés, personal service, etc.	78.8	86.0	93.5	100.0	105.5	113.1
Other(*c*)	43.9	50.3	53.2	56.1	59.1	62.8
Total	*868.9*	*991.4*	*1,051.0*	*1,096.2*	*1,139.8*	*1,188.5*

For footnotes *see* page 1136.

WAGE AND SALARY EARNERS IN CIVILIAN EMPLOYMENT BY INDUSTRY GROUP AND SEX: AUSTRALIA, JUNE 1961 TO JUNE 1968(*a*)—*continued*

EXCLUDING DEFENCE FORCES AND EMPLOYEES IN AGRICULTURE AND PRIVATE DOMESTIC SERVICE

('000)

Industry group	*June 1961*	*June 1964*	*June 1965*	*June 1966*	*June 1967*	*June 1968*
PERSONS						
Mining and quarrying . . .	49.6	48.1	49.4	52.3	53.8	56.7
Manufacturing(*b*)	1,055.1	1,198.5	1,246.1	1,252.3	1,271.4	1,300.2
Electricity, gas, water, and sanitary services	94.7	99.9	101.6	105.1	106.9	109.1
Building and construction . .	279.7	295.8	305.6	317.2	306.5	318.2
Transport and storage . . .	207.4	210.6	217.3	222.8	223.6	228.9
Communication	93.5	97.4	99.9	102.6	106.9	110.0
Finance and property . . .	134.6	152.1	160.4	169.1	175.5	182.5
Retail trade	342.0	380.3	393.4	400.7	409.9	419.5
Wholesale and other commerce .	210.6	222.6	232.6	237.8	239.5	245.2
Public authority activities (n.e.i.) .	129.6	144.8	152.1	162.7	172.0	180.1
Health, hospitals, etc. . . .	133.6	152.9	160.5	166.4	171.7	179.3
Education	130.7	157.4	165.4	176.2	184.9	197.9
Amusement, hotels, cafés, personal service, etc.	148.9	164.2	176.7	187.8	197.5	210.8
Other(*c*)	123.2	136.3	143.2	149.6	155.2	164.6
Total	**3,133.2**	**3,460.7**	**3,604.1**	**3,702.8**	**3,775.1**	**3,902.9**

(*a*) Figures for periods subsequent to June 1961 are being revised; *see* pages 1132–3. (*b*) As well as employees engaged directly in manufacturing activity, these figures include the employees of manufacturing enterprises or establishments who are engaged in selling and distribution, etc. (*c*) Comprises forestry, fishing and trapping; law, order and public safety; religion and social welfare; and other community and business services.

WAGE AND SALARY EARNERS IN CIVILIAN EMPLOYMENT, BY SEX STATES AND TERRITORIES, JUNE 1961 TO JUNE 1968(*a*)

EXCLUDING DEFENCE FORCES AND EMPLOYEES IN AGRICULTURE AND PRIVATE DOMESTIC SERVICE

('000)

June—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T. (b)*	*Aust.*
MALES									
1961 . . .	876.5	643.6	291.7	207.5	148.5	73.2	7.3	16.0	2,264.3
1964 . . .	947.7	702.8	316.8	229.4	164.3	77.4	8.9	21.9	2,469.3
1965 . . .	976.9	723.5	329.1	239.9	171.5	78.4	9.5	24.2	2,553.1
1966 . . .	996.2	733.4	336.6	242.1	180.7	81.1	10.5	26.0	2,606.6
1967 . . .	1,006.4	744.8	335.2	243.2	183.9	82.7	11.6	27.4	2,635.3
1968 . . .	1,031.4	763.1	345.0	250.0	198.1	84.3	13.1	29.4	2,714.4

For footnotes *see* next page.

WAGE AND SALARY EARNERS IN CIVILIAN EMPLOYMENT, BY SEX STATES AND TERRITORIES, JUNE 1961 TO JUNE 1968—*continued*

EXCLUDING DEFENCE FORCES AND EMPLOYEES IN AGRICULTURE AND PRIVATE DOMESTIC SERVICE

('000)

June—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T. (b)*	*Aust.*
				FEMALES					
1961	343.6	266.2	102.1	72.3	51.2	24.9	2.3	6.3	868.9
1964	390.7	300.6	115.5	86.0	58.5	27.1	3.0	10.0	991.4
1965	412.6	316.3	123.1	93.4	62.7	28.1	3.2	11.5	1,051.0
1966	426.7	328.4	128.9	97.7	68.0	29.8	3.6	13.1	1,096.2
1967	443.4	340.9	133.9	99.7	72.4	30.9	4.1	14.4	1,139.8
1968	460.3	350.9	139.9	106.0	78.7	31.9	4.8	16.0	1,188.5
				PERSONS					
1961	1,220.1	909.8	393.8	279.8	199.7	98.1	9.6	22.3	3,133.2
1964	1,338.4	1,003.3	432.3	315.5	222.9	104.5	11.9	31.9	3,460.7
1965	1,389.5	1,039.8	452.2	333.3	234.2	106.5	12.7	35.7	3,604.1
1966	1,422.9	1,061.8	465.5	339.8	248.7	110.9	14.1	39.1	3,702.8
1967	1,449.8	1,085.7	469.1	342.9	256.3	113.6	15.7	41.8	3,775.1
1968	1,491.7	1,114.0	484.9	356.0	276.8	116.2	17.9	45.4	3,902.9

(*a*) Figures for periods subsequent to June 1961 are being revised; *see* pages 1132–3. (*b*) Includes persons employed in the Australian Capital Territory who reside in adjoining areas.

Government employees

The numbers of civilian employees of Commonwealth, State and local government authorities in each State and Territory at June 1968 are shown in the following table. These include employees within Australia of government authorities on services such as railways, tramways, banks, post office, air transport, education (including universities), broadcasting, television, police, public works, factories and munitions establishments, departmental hospitals and institutions, migrant hostels, etc., as well as administrative employees.

CIVILIAN EMPLOYEES OF GOVERNMENT AUTHORITIES, BY SEX STATES AND TERRITORIES, JUNE 1968

('000)

	Commonwealth Government(a)			*State Government(a)*			*Local Government*			*Total(a)*		
State or Territory	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
New South Wales	78.2	23.7	101.9	157.3	51.3	208.5	44.9	5.4	50.3	280.3	80.4	360.7
Victoria	64.1	19.3	83.4	121.6	36.8	158.4	17.8	2.5	20.3	203.6	58.6	262.2
Queensland	23.3	6.7	30.0	68.1	17.2	85.3	17.9	1.4	19.3	109.3	25.3	134.6
South Australia	22.3	5.3	27.7	47.7	18.5	66.2	4.5	0.6	5.1	74.5	24.4	98.9
Western Australia	13.2	3.6	16.8	43.9	12.7	56.6	5.3	0.7	6.0	62.4	17.0	79.3
Tasmania	5.0	1.5	6.5	18.6	5.3	23.9	2.3	0.3	2.6	25.9	7.1	33.0
Northern Territory	5.7	2.1	7.9	..	..	..	0.1	..	0.1	5.8	2.2	8.0
Australian Capital Territory	17.9	9.2	27.1	..	..	..	..	..	..	17.9	9.2	27.1
Australia	**229.8**	**71.6**	**301.4**	**457.2**	**141.8**	**598.9**	**92.8**	**10.8**	**103.6**	**779.8**	**224.2**	**1,003.9**

(*a*) Includes semi-government authorities. *See* explanation above.

CIVILIAN EMPLOYEES OF GOVERNMENT AUTHORITIES, BY SEX: AUSTRALIA
JUNE 1961 TO JUNE 1968
('000)

June—	*Commonwealth Government(a)*			*State Government(a)*			*Local Government*			*Total(a)*		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
1961	182.0	49.7	231.7	411.5	96.9	508.4	76.2	7.8	84.0	669.7	154.4	824.1
1964	195.9	54.4	250.3	428.9	113.2	542.1	82.2	8.7	90.9	707.0	176.3	883.3
1965	203.3	59.4	262.8	430.9	119.2	550.1	84.2	9.2	93.4	718.4	187.8	906.2
1966	213.3	64.7	278.0	442.3	127.4	569.8	89.5	9.7	99.1	745.1	201.8	946.9
1967	222.6	68.8	291.4	445.6	133.5	579.1	88.7	10.4	99.1	756.9	212.7	969.5
1968	229.8	71.6	301.4	457.2	141.8	598.9	92.8	10.8	103.6	779.8	224.2	1,003.9

(*a*) Includes semi-government authorities. *See* explanation on page 1137.

COMMONWEALTH EMPLOYMENT SERVICE

Statutory warrant for the Commonwealth Employment Service (C.E.S.) is to be found in the *Re-establishment and Employment Act* 1945–1966 (sections 47 and 48). In brief, the main functions of the C.E.S. are to assist people seeking employment to obtain positions best suited to their training, experience, abilities, and qualifications; and to assist employers seeking labour to obtain employees best suited to their needs. The organisation and functions of the C.E.S. conform to the provisions of the Employment Service Convention, 1948, of the International Labour Organisation, which was ratified by Australia in December 1949. In addition, C.E.S. practices accord substantially with the provisions of the I.L.O. Employment Service Recommendation, 1948.

The C.E.S. functions on a decentralised basis within the Employment and Industrial Services Division of the Department of Labour and National Service. The Central Office is in Melbourne and there is a Regional Office in the capital city of each State. There are 154 District Employment Offices and Branch Offices in suburban and the larger provincial centres and 324 agents in the smaller country centres. The District Employment Offices and Branch Offices are distributed as follows: New South Wales, 54; Victoria, 38; Queensland, 26; South Australia, 14; Western Australia, 15; Tasmania, 4; Northern Territory, 2; Australian Capital Territory, 1.

Specialised facilities are provided for young people, persons with physical and mental handicaps, ex-members of the defence forces, national service dischargees, migrants, rural workers, and persons with professional and technical qualifications. The C.E.S. provides vocational guidance free of charge in all States and has a staff of qualified psychologists for this function. Guidance is available to any person, but is provided particularly for young people, ex-servicemen and the handicapped. In New South Wales the C.E.S. provides vocational guidance to adults, including ex-servicemen and the handicapped, while the State Department of Labour and Industry provides a vocational guidance service within the school system and for young persons leaving school.

All applicants for unemployment benefits under the *Social Services Act* 1947–1968 must register at a District Office or agency of the C.E.S., which is responsible for certifying whether or not suitable employment can be offered to them. The C.E.S. is responsible for placing in employment migrant workers sponsored by the Commonwealth under the Commonwealth Nomination and similar schemes. This includes arranging for them to move to their initial employment and for their admission, if necessary, to Commonwealth migrant hostels. Assistance in obtaining employment is provided to other migrants as required. From the inception of the various free and assisted schemes, including the Displaced Persons Scheme, to the end of June 1969, about 261,000 British and European migrant workers had been placed in initial employment by the C.E.S. Since 1951 it has been responsible for recruiting Australian experts for overseas service under the Colombo Plan and the United Nations Expanded Programme of Technical Assistance (now replaced by the U.N. Development Programme). The principal spheres in which experts have been supplied are agriculture, education, engineering, geology, health, and economic and scientific research and development.

In association with placement activities, regular surveys of the labour market are carried out and detailed information is supplied to interested Commonwealth and State Government departments and instrumentalities and to the public. Employers, employees and other interested persons are advised on labour availability and employment opportunities in various occupations and areas and on other matters concerning employment.

The Service completed its twenty-third year of operation in May 1969. During 1968 there were 1,091,758 applicants who registered for employment, of whom 784,475 were referred to employers and 461,388 placed in employment. New vacancies notified numbered 655,713.

Persons registered for employment

The following table shows the number of persons who claimed, when registering for employment with the Commonwealth Employment Service, that they were not employed and who were recorded as unplaced. The figures include those persons who were referred to employers and those who may have obtained employment without notifying the C.E.S. They include persons in receipt of unemployment benefit (*see* the chapter Welfare Services).

PERSONS REGISTERED FOR EMPLOYMENT WITH COMMONWEALTH EMPLOYMENT SERVICE: STATES, JUNE 1965 TO JUNE 1969

(*Source:* Department of Labour and National Service)

June(a)	*N.S.W. (b)*	*Vic.*	*Qld*	*S.A.(c)*	*W.A.*	*Tas.*	*Aust.*
1965	15,670	8,771	8,360	3,533	3,576	2,235	42,145
1966	22,837	14,026	9,735	7,357	3,370	1,695	59,020
1967	24,957	16,152	13,025	8,484	3,757	2,116	68,491
1968	20,808	19,595	10,252	8,359	4,151	2,088	65,253
1969	18,277	13,254	10,908	6,300	4,007	2,120	54,866

(*a*) Generally at Friday nearest end of month. (*b*) Includes Australian Capital Territory. (*c*) Includes Northern Territory.

Job vacancies

The following table shows the number of vacancies registered with the Commonwealth Employment Service. The figures refer to vacancies which employers claimed were available immediately or would be available by the end of the following calendar month.

VACANCIES REGISTERED WITH COMMONWEALTH EMPLOYMENT SERVICE STATES, JUNE 1965 TO JUNE 1969

(*Source:* Department of Labour and National Service)

June(a)	*N.S.W. (b)*	*Vic.*	*Qld*	*S.A.(c)*	*W.A.*	*Tas.*	*Aust.*
1965	15,602	17,901	3,769	4,356	2,422	639	44,689
1966	10,734	13,751	3,239	1,507	2,965	825	33,021
1967	10,384	11,459	2,345	1,342	2,411	1,394	29,335
1968	11,416	9,411	2,605	1,591	2,630	1,069	28,722
1969	14,053	11,777	2,057	2,561	3,786	762	34,996

(*a*) Generally at Friday nearest end of month. (*b*) Includes Australian Capital Territory. (*c*) Includes Northern Territory.

CHAPTER 29

THE TERRITORIES OF AUSTRALIA

The internal Territories of Australia are the Northern Territory and the Australian Capital Territory. External Territories under the control of Australia are: Norfolk Island; the Territory of Papua (formerly British New Guinea); the Territory of New Guinea (under Trusteeship Agreement with the United Nations); the Territory of Heard and McDonald Islands; the Australian Antarctic Territory; the Territory of Cocos (Keeling) Islands; and the Territory of Christmas Island. There is also the Territory of Ashmore and Cartier Islands, deemed to form part of the Northern Territory.

Information on all except Ashmore and Cartier Islands is contained in the following pages, and details of the acquisition of all the Territories will be found on pages 5, 22, and 23 of Chapter I. More detailed statistics and additional descriptive matter are to be found in the Annual Reports of the Administrations of the various Territories and in the *Northern Territory Statistical Summary* and the *Australian Capital Territory Statistical Summary* issued by this Bureau. Statistics for the Northern Territory and the Australian Capital Territory are also included in chapters dealing with particular subjects. The Statistician, Territory of Papua and New Guinea, issues a number of publications containing statistics relative to these two Territories, separate and combined.

Responsibility for the general administration of the Territories of Norfolk Island, Papua, New Guinea, Cocos (Keeling) Islands and Christmas Island is vested with the Commonwealth Department of External Territories; for the Northern Territory (including Ashmore and Cartier Islands) and the Australian Capital Territory with the Department of the Interior; and for Antarctica and Heard and McDonald Islands with the Department of Supply. Matters excepted are defence and civil aviation, and, in the Northern Territory and the Australian Capital Territory, public health, justice, education (excluding Aborigines) and the provision of the basic physical services, which are the responsibility of the Department of Health, the Attorney-General's Department, the Department of Education and Science, and the Department of Works, respectively.

THE NORTHERN TERRITORY

General description

Area

Upon the extension of New South Wales westwards to the 129th east meridian in 1825, the Northern Territory was incorporated in that colony, but in 1863 it was annexed by Royal Letters Patent to the province of South Australia. With the adjacent islands, it was transferred to the Commonwealth on 1 January 1911. The total area is 520,280 square miles.

Legislation and administration

On 1 January 1911 the Territory was transferred from South Australia to the Commonwealth. The terms were outlined in Year Book No. 15, page 940.

The *Northern Territory* (*Administration*) *Act* 1910–1968 provides for an Administrator, appointed by the Governor-General, to administer the Territory on behalf of the Commonwealth.

It provides for a Legislative Council for the Northern Territory to make ordinances for the peace, order and good government of the Territory. This Council consists of six official members and eleven elected members. A President of the Council is elected from among these elected members. Money votes may be proposed in the Council only upon recommendation by message of the Administrator.

Ordinances are presented to the Administrator for assent. He is obliged to reserve ordinances relating to certain matters, including Crown lands and Aborigines, for the Governor-General's pleasure. Others he may assent to, withhold assent from, or return to the Legislative Council with recommended amendments. The Governor-General may disallow any ordinance assented to by the Administrator and, in respect of an ordinance reserved for his pleasure, he may assent, withhold assent, withhold assent to part, or recommend to the Administrator any amendments to the laws of the Territory that he considers desirable arising out of his consideration of the ordinance.

The Act also provides for an Administrator's Council to advise the Administrator on any matter referred to it, either by the Administrator, or in accordance with the provisions of any ordinance of the Northern Territory. The Council consists of the Administrator, and two official and three elected members of the Legislative Council.

The Territory elects one member to the House of Representatives.

The Corporation of the City of Darwin, established in 1957, consisting of a Mayor and eight Aldermen elected by adult franchise, provides municipal administration in Darwin. Elsewhere in the Territory municipal services are provided by the Administration. Town management boards representing local interests have been established in Alice Springs, Katherine and Tennant Creek to advise the Administration on local matters.

Physiography

The Territory is within the torrid zone, with the exception of a strip about 180 miles wide which lies south of the Tropic of Capricorn.

The low flat coastline seldom reaches a height of 100 feet. Sandy beaches and mud flats, thickly fringed with mangroves, prevail. Sandstone, marl and laterite form the occasional cliffy headlands. The sea frontage of more than 1,000 miles is indented by bays and inlets and intersected by numerous rivers, many of which are navigable for considerable distances from their estuaries. The only practicable deep-water port, however, is Darwin.

Inland the country generally is devoid of conspicuous landmarks. From the coast there is a general rise southwards to the vicinity of the seventeenth or eighteenth parallel of south latitude, where the higher lands form the watershed between the rivers that flow northwards to the sea and those that form the scanty supply for the interior systems. Towards the centre of the continent the land over a wide area is of considerable elevation, and there are several mountain ranges, generally with an east and west trend.

Climate, fauna and flora

There are two main climatic divisions, the wet season, November to April, and the dry season, May to October, with uniform and regular changes of weather. Nearly all the rainfall occurs in the summer months. Further particulars appear in Year Book No. 6, page 1116.

The ordinary types of native Australian fauna inhabit the Territory. As elsewhere on the continent, the higher *Theria* are rare, but marsupials, birds, crocodiles, fresh-water tortoises, snakes (mostly non-venomous), and frogs abound. There are many varieties of fresh-water fish and littoral *Mollusca.* Butterflies and beetles are strongly represented. The termite is a pest which is capable of serious damage to wooden buildings unless special preventive measures are taken. A species of the ant builds anthills which sometimes attain great dimensions. Mosquitoes and sandflies are very troublesome, particularly in the wet season. Some types of native fauna are protected. Buffalo formerly existed in large herds, but their number has been reduced by indiscriminate shooting. Buffalo shooting is, however, now strictly controlled by ordinance.

The vegetation is north Australian in type but a number of forms belong to the Malayan and Oceanic regions. The climate and generally poor soils associated with it give rise to tropical savannah vegetation, with the size and volume of woody material present being closely related to rainfall and the quality of the forests decreasing strikingly as one proceeds inland from the northern coastline. In the north, cypress pine which is termite resistant, ironwood, bloodwood and paperbark timbers are cut and milled for local building purposes. Further inland particularly on the Barkly Tableland and parts of the Victoria River district there are better grazing grasses and some shrubs, while the wide belt of sandy plain, between the Barkly Tableland and the ranges in the Alice Springs area, carries mainly spinifex grass and low scrub. The Alice Springs ranges and uplands carry chiefly a dwarf acacia scrub known as mulga, spinifex and other sparse grasses. The principal orders represented in the interior are *Euphorbiaceae*, *Compositae*, *Convolvulaceae*, *Rubiaceae*, *Goodenoviaceae*, *Leguminosae* and *Utricaceae*.

Population

See also the chapters Population and Vital Statistics.

The estimated population of the Northern Territory at 31 December 1968, including Aborigines, was 34,800 males, 29,100 females, 64,000 persons. The Aboriginal population at the census of 30 June 1966 totalled 10,651 males, 10,468 females, 21,119 persons. While few Aborigines now live outside settled areas and not all choose to live on reserves, a large area of reserved land totalling 94,196 square miles has been maintained to provide economic resources from which the Aborigines may benefit either directly or from royalty payments.

Advancement of Aborigines

The Commonwealth and State governments have adopted a common policy of assimilation which seeks that all persons of Aboriginal descent will choose to attain a similar manner and standard of living to that of other Australians and live as members of a single Australian community, enjoying the same rights and privileges, accepting the same responsibilities and influenced by the same hopes and loyalties as other Australians.

Legal status

Under the *Nationality and Citizenship Act* 1948–1966, all Aborigines are British subjects and Australian citizens. Since the commencement of the *Social Welfare Ordinance* 1964 in September 1964, Aborigines in the Northern Territory have been equal at law with all other residents, although some special benefits have been retained for them or have been introduced since then. The Ordinance enables assistance to be given to any person who is socially or economically in need.

Production

See also the chapters dealing with particular subjects.

Land tenure

Three-sevenths of the land in the Territory is reserved or unoccupied and unreserved, the remainder, apart from a very small proportion alienated, being held under various forms of lease or licence, which are described in Year Book No. 48, pages 111–12. The following changes should, however, be noted.

Leases to Mission Organisations are now granted under the *Special Purpose Leases Ordinance* 1953–1965 for fixed terms or in perpetuity.

Miscellaneous Leases are now granted in perpetuity for purposes such as a market garden, plantation, orchard, vineyard, poultry farm, piggery, or the like.

Darwin Town Area Leases are granted in perpetuity for business or residential purposes, or both, in the Darwin Town Area.

The chapter Rural Industry of this issue contains statistical information concerning areas occupied under various forms of tenure.

Agriculture

Until the 1967–68 season, commercial agricultural production was confined to vegetables and small-scale fruit production for local consumption. The introduction of grain sorghum production on a commercial basis has thrown new emphasis on the development of agriculture. Townsville lucerne seed production has grown considerably and has become an important contributor to the income of many small landholders.

Information concerning scientific surveys (commenced in 1946), conducted by the Commonwealth Scientific and Industrial Research Organization to determine more accurately the potentialities of the Northern Territory, and the resulting establishment of an agricultural research station at Katherine and experimental farms at Katherine and Berrimah (near Darwin), is given in Year Book No. 51, page 101, and in earlier issues. Information is given also on the establishment of rice research stations and investigational work carried out, and on subsequent rice crop commercial scale operations. The appointment by the Minister for Territories in 1959 of an expert committee to carry out investigations relative to agricultural settlement in the Territory and subsequent developments are also referred to.

NORTHERN TERRITORY: AREA AND PRODUCTION OF CROPS 1963-64 TO 1967-68

Crop		*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
		AREA(*a*) (acres)				
Fruit—Bananas		43	28	20	29	(*b*)
Pineapples		23	19	12	17	(*b*)
Other		83	83	78	87	98
Total, fruit		*149*	*130*	*110*	*133*	*98*
Peanuts		(*b*)	(*b*)	16	(*b*)	12
Sorghum for grain		527	1,269	1,093	527	(*c*)
Vegetables for human consumption		133	150	144	218	199
Other crops(*d*)		1,680	2,687	2,699	2,747	5,691
Grand total(*a*)		**2,489**	**4,236**	**4,062**	**3,625**	**6,000**
		PRODUCTION				
Fruit—Bananas	bushels	2,174	2,448	1,985	1,684	(*e*)
Pineapples	,,	943	1,142	990	997	(*e*)
Peanuts	cwt	(*e*)	(*e*)	76	(*e*)	32
Sorghum (grain)	bushels	6,210	10,693	12,018	7,533	(*e*)

(*a*) Excludes rice; details are not available for publication. (*b*) Not available for publication, included in Other crops. (*c*) Not available for publication, excluded from totals. (*d*) Principally fodder crops. (*e*) Not available or publication.

Pastoral industry

The pastoral possibilities of certain parts of the Territory were recognised at an early date, and both cattle and sheep raising have been attempted. For various reasons sheep-raising has not been very successful, but the cattle industry has progressed steadily and is continuing to expand. There is substantial potential for further expansion in the higher rainfall area of the Territory through the introduction of improved pastures and the use of superphosphate.

NORTHERN TERRITORY: LIVESTOCK, JUNE 1964 TO 1968

30 June—	*Horses*	*Cattle*	*Sheep*	*Pigs*
1964	38,391	1,105,161	10,023	1,806
1965	35,997	1,067,327	9,099	2,182
1966	36,719	1,031,715	8,875	2,275
1967	37,638	1,097,114	8,319	2,791
1968	38,000	1,130,000	9,000	2,000

Mining

During 1967, the value of output of the mining and quarrying industry in the Territory, excluding uranium mining, particulars of which are not available for publication, was $19,316,000. The main minerals produced were copper, manganese, iron ore and gold. This represented an increase of 45 per cent on the previous year.

The bulk of the copper and gold produced in the Territory is obtained from underground mines in the Tennant Creek district. A new small rich gold-mine at Juno came into production in 1967. At Warrego, a low grade copper/gold ore body is being developed and production is scheduled to commence at the end of 1969.

Manganese ore is being produced by open cut methods from extensive deposits at Groote Eylandt in the Gulf of Carpentaria. Production capacity at Groote Eylandt was progressively increased during 1967 with the object of reaching an annual capacity of 400,000 tons. This production supplied all Australian requirements of manganese ore and large tonnages were exported to Japan, Europe and the U.S.A. Preliminary figures for 1968 show that the value of output of manganese ore exceeded that of copper. A further major expansion of manganese ore production is planned.

Production of iron ore at Frances Creek commenced in 1966 and at Mount Bundey in 1967. The output from both of these mines is being exported to Japan. Ore shipments in 1968 from Frances Creek and Mount Bundey were running at an annual rate of 550,000 tons and 200,000 tons respectively.

At Gove, considerable construction activity is in progress as part of a large scale development of extensive bauxite deposits. Under an agreement between the Commonwealth and Nabalco Pty Ltd signed in February 1968 and ratified by ordinance passed by the Northern Territory Legislative Council on 16 May 1968, Nabalco undertook to build an alumina plant with an annual capacity of not less than 500,000 tons by 31 December 1971 in the Northern Territory. In May 1969, under the terms of a supplemental agreement, the equity capital of the project is to be held as to 70 per cent by Swiss Aluminium Australia Pty Ltd, and as to 30 per cent by Gove Aluminium Ltd (a consortium of seven Australian companies). Further, the alumina plant is to have an eventual capacity of 1 million tons per annum and is to be built in two stages, of which the first is scheduled for completion by the end of 1971 with a capacity of 500,000 tons per annum. Under this agreement, exports of bauxite will amount to 40 million tons over twenty years.

In September 1968 the Commonwealth Government accepted a joint proposal from two private companies to carry out further exploration and development work on the Woodcutters lead-zinc prospect.

Further investigations have been carried out into possible methods of treating the extensive lead-zinc deposits located in the McArthur River district. Conventional methods are not considered to be suitable for the treatment of these ores.

The search for oil and natural gas in the Territory is continuing. Expenditure on petroleum exploration activity in the Northern Territory for 1968, excluding direct Commonwealth expenditure, totalled $7.7 million. The main areas of interest are the Amadeus Basin of Central Australia and the offshore areas of the Bonaparte Gulf Basin and the Ashmore and Cartier Islands area. Natural gas was discovered in the Amadeus Basin in 1964. Combined reserves at Mereenie and Palm Valley near Alice Springs are estimated at 1,500,000 million cubic feet. Petroleum exploration is being carried out in the Northern Territory in permit areas covering some 286,000 square miles, of which over one-third is off-shore.

NORTHERN TERRITORY: MINING AND QUARRYING OPERATIONS, 1964 TO 1967

(Excluding uranium mining)

		1964	*1965*	*1966*	*1967*
Number of mines and quarries		84	67	80	74
Average number of persons employed during whole year (including working proprietors)		585	688	814	1,006
Salaries and wages paid(*a*)(*b*)	$'000	2,138	2,867	3,361	4,609
Total fuel, materials, etc., used	,,	1,727	2,571	2,212	2,901
Value of additions and replacements to fixed assets(*a*)	,,	2,866	5,677	7,282	5,195
Value of output (at mine or quarry)	,,	7,233	8,308	13,283	19,316
Value of production(*c*)	,,	5,506	5,736	11,070	16,416

(*a*) Excludes mines employing less than four persons. (*b*) Excludes drawings by working proprietors; the amounts are net after deducting value of explosives sold to employees. (*c*) Value of output less cost of power, fuel and light and other materials and stores used; depreciation and maintenance costs have not been deducted.

Forestry

A programme of forest improvement and development to preserve existing forest areas and increase timber resources is undertaken by the Forestry Branch of the Northern Territory Administration, which was formed in 1967 to take over normal State-type forestry functions previously performed by the Forestry and Timber Bureau. Basic forestry research is carried out by the Bureau at a Regional Research Station established at Berrimah. The Territory forestry programme includes the establishment of softwood plantations (mainly native cypress pine) at the rate of 1,000 acres per year and makes provision for the employment and training of Aborigines in forestry work. Local production of log timber, mainly cypress pine, amounted to 1,159,578 super feet in 1967–68 but this was insufficient to meet local needs and some 4,122,200 super feet of sawn timber was imported from the States and overseas. During 1967–68 interested companies were issued with feasibility study licences to permit them to conduct pre-investment feasibility studies into the possibility of establishing wood chip industries in the Northern Territory.

Pearl fisheries

In 1884 mother-of-pearl shell was discovered in Darwin harbour. Since then the areas fished have extended to the various banks to seaward and along the Northern Territory coast. Because of competition from plastic materials pearling has declined in recent years, but it is hoped that the commercial production of cultured pearls will succeed in replacing the old pearling industry.

NORTHERN TERRITORY: FISHING AND PEARLING(*a*), 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
General fisheries—						
Number of boats engaged		30	28	43	60	53
Number of men employed		54	69	120	133	123
Estimated live weight of fish catch	'000lb	269	316	376	601	607
Gross value of fish	$'000	45	55	57	73	92
Pearl-shell fisheries(*b*)—						
Number of boats engaged		2	2	3	3	3
Number of men employed		23	22	37	36	36
Total take of pearl-shell	tons	4.9	5.4	8.9	16.6	4.8
Gross value of pearl-shell	$'000	2	2	4	7	1

(*a*) Excludes operations of Japanese pearling fleet. (*b*) Season ended January.

In April 1968 seven companies were approved by the Minister for the Interior and the Minister for Primary Industry to participate in the development of prawn fishing and processing in respect of waters adjacent to the Northern Territory. Three of the companies were joint ventures involving the use of foreign vessels and foreign crews for a limited period. Conditions of the Ministers' approval include the establishment of shore prawn processing plants in the Territory, the replacement of foreign vessels and crews with Australian-built vessels and Australian crews, the location at Darwin of all the processing plants of the joint ventures, and protection, during a limited establishment period, against the development of shore processing plants on parts of the coast other than at Darwin. Provision has also been made for participation in the industry by Aborigines.

Secondary industries

The secondary industries that have so far been established in the Territory have been largely the service industries normally associated with a developing area, such as electrical repairs, printing, motor and marine engineering, plumbing, welding, joinery, sheet metal work, and blue metal crushing. Major industrial investments by private interests in recent years include two breweries, a bitumen plant, and a factory for the manufacture of milk products, ice cream and aerated waters.

NORTHERN TERRITORY: FACTORIES, 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories(*a*)		139	174	185	187	188
Average number employed(*b*)—						
Males		978	1,098	1,182	1,308	1,380
Females		97	112	112	115	139
Persons employed		*1,075*	*1,210*	*1,294*	*1,423*	*1,519*
Salaries and wages paid(*c*)—						
Males	$'000	2,628	3,298	3,666	4,146	4,721
Females	,,	142	185	192	203	263
Total salaries and wages paid	,,	*2,770*	*3,483*	*3,859*	*4,349*	*4,983*
Value of power, fuel, light, etc. used(*d*)	,,	735	865	856	946	1,159
Value of materials used(*e*)	,,	3,384	4,550	5,497	7,214	7,995
Value of production(*f*)	,,	4,938	6,654	7,103	7,847	9,680
Value of output(*g*)	,,	9,057	12,068	13,456	16,007	18,831
Value of land and buildings(*h*)	,,	4,586	5,668	6,101	6,482	8,150
Value of plant and machinery(*h*)	,,	6,046	6,103	5,954	6,825	6,696

(*a*) Any factory, workshop or mill in which four or more persons are employed or power other than hand is used. (*b*) The aggregate of the average number of persons employed in each factory. Includes working proprietors. Figures represent average employment over the whole year. (*c*) Excludes drawings by working proprietors. (*d*) Includes water and lubricating oil. (*e*) Includes also containers, etc., tools replaced and repairs to plant. (*f*) Value added in process of manufacture (i.e. value of output less value of materials and fuel used). (*g*) Value of goods produced including amounts received for repair work and other work done. (*h*) Depreciated or book value at end of year, including estimated value of rented premises and machinery.

Trade, transport and communication

Trade

No comprehensive record is kept of the trade between the States and the Territory. The following table shows the values of the principal commodities imported into and exported from the Northern Territory from or to overseas countries during the years 1963–64 to 1967–68.

NORTHERN TERRITORY: PRINCIPAL OVERSEAS IMPORTS AND EXPORTS, 1963-64 TO 1967-68
($'000)

Commodity	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
IMPORTS					
Petroleum and shale spirit—					
Aviation spirit	232	143	158	277	216
Other (motor spirit)	389	339	456	542	587
Aviation turbine fuel	670	1,022	955	615	1,099
Other oil(*a*)	310	487	838	781	1,112
Sulphur	141	71	. .	70	486
Portland cement	174	322	410	311	370
Timber (undressed hardwood)	151	214	334	183	206
Iron and steel manufactures	(*b*)	(*b*)	832	3	1,195
Machinery and transport equipment			922	3,914	2,376
Other articles	870	1,526	691	690	1,760
Total imports	**2,937**	**4,124**	**5,596**	**7,386**	**9,407**
EXPORTS(*c*)					
Meats	1,546	2,323	3,348	3,422	4,864
Hides and skins, raw	237	123	61	227	135
Iron ore and concentrates	. .	. .	. .	. .	3,053
Non-ferrous ores and concentrates	. .	9	173	2,682	4,474
Copper ores and concentrates	78	805	2,044	1,512	775
Pearls	180	170	179	34	39
Other articles	433	379	593	1,091	4,515
Total exports	**2,474**	**3,809**	**6,398**	**8,968**	**17,855**

(*a*) Includes kerosene, gas oil, diesel oil, residual oil, etc. (*b*) Included in other articles. (*c*) Includes domestic exports and re-exports.

Shipping

Shipping services to Darwin are provided from the eastern States by ships of the Australian National Line and from Western Australia by the Western Australian State Shipping Service. Oil tankers carrying supplies of aircraft fuel and other petroleum products, overseas cargo ships carrying iron ore to Japan and other miscellaneous vessels also visit Darwin. A vessel operated from Brisbane serves settlements on the Gulf of Carpentaria, and some mission-owned boats carry cargo from Darwin to mission stations and government settlements along the coast.

Air services

At 30 June 1967 there were 128 aerodromes in the Territory, nine of which are maintained by the Commonwealth Department of Civil Aviation. The overseas passenger services using the Darwin international airport are Lufthansa (Sydney to Frankfurt); Qantas/B.O.A.C. (Sydney to London); B.O.A.C. (Sydney to Hong Kong); Union de Transports Aeriens (Paris to Los Angeles via Noumea); and T.A.A. on behalf of Transportes Aeros de Timor (Darwin to Baucau). Regular inland services to Darwin, with, in some cases, intermediate stops at Territory centres, are operated by Trans-Australia Airlines and Ansett Airlines (from Adelaide, Melbourne, Sydney and Brisbane), and MacRobertson-Miller Airways Ltd (from Perth and Derby). MacRobertson-Miller Airways Ltd and Connellan Airways Ltd operate a network of air services throughout the Territory, the latter company's base being at Alice Springs. The Royal Flying Doctor Service also operates aircraft, while charter services can be secured at Darwin and Alice Springs.

Railways

The Commonwealth Railways Commissioner operates the Central Australia Railway from Port Augusta in South Australia to Alice Springs over a distance of 822 miles, of which about 200 are in the Northern Territory. The line is standard gauge from Port Augusta to Maree, a distance of 217 miles, and 3ft 6 in from Maree to Alice Springs. The Commissioner also operates the North Australia Railway between Darwin and Birdum on a 3 ft 6 in gauge over a distance of 317 miles. The two inland terminals, Alice Springs and Birdum, are about 630 miles apart and are connected by road transport along the Stuart Highway. Larrimah, on the highway and 6 miles north of Birdum, is the point of trans-shipment for passengers and goods and is, at present, the effective terminal. A road-rail freight service operates between Adelaide and Darwin via Alice Springs.

Roads

The Stuart Highway, 954 miles long, connects Alice Springs with Darwin and runs via Larrimah and Tennant Creek. The Barkly Highway, 403 miles long, connects Mount Isa (Queensland) with Tennant Creek and joins the Stuart Highway some 16 miles north of Tennant Creek. These highways are used for carrying various freights, including cattle, particularly to and from the railheads at Alice Springs, Larrimah and Mount Isa. The routes are used also for overland tourists and travellers from the southern States to Darwin. With the further development of the pastoral and mining industries in the Territory, road trains are now being used on both highways for the export of cattle and ore. Both roads have good water bores and communications. There are now approximately 12,000 miles of roads in the Territory of which 1,798 miles are sealed.

Work on a programme for reconstruction and development of beef cattle roads was commenced in 1961–62. To June 1968 $30.2 million has been authorised for this work, and actual expenditure to 30 June 1968 was $14.2 million. The transport of cattle by road is expected to increase the number, quality and value of cattle turned off.

Posts, telegraph, telephones and wireless

Postal communication is maintained by road, rail and air transport between Darwin and the capital cities of Australia. In addition, vessels belonging to the Western Australian State Shipping Service provide a regular service between Fremantle and Darwin. Inland, the northern part of the Territory receives its mail via Darwin or by means of the aerial services, and the southern districts are served via Adelaide.

The overland telegraph line, covering a length of 2,230 miles, runs from Adelaide to Darwin, and links Darwin in telegraphic communication with other parts of the world. Long-distance telephone communication is established between Darwin and the capital cities of Australia, and overseas telephone communication through Sydney or Perth is also available.

Regional national broadcasting stations are situated at Darwin, Alice Springs, Tennant Creek and Katherine, and there is a commercial station at Darwin. The majority of homesteads on pastoral leases are equipped with radio transceivers operated under licence from the Postmaster-General's Department. These stations are in daily communication with Flying Doctor bases situated at Alice Springs (Northern Territory), Wyndham (Western Australia), Broken Hill (New South Wales), and Cloncurry (Queensland), and are used for transmission of radio-telegrams and other communications.

Education

See also the chapter Education, Cultural Activities and Research.

Special Aborigines schools

While the Department of Education and Science is now responsible for education in the Northern Territory, special schools and pre-schools for Aboriginal children remain the responsibility of the Welfare Branch of the Administration. These special schools and pre-schools are intended as an interim measure only, policy being that all Aboriginal children should eventually receive their education in the community schools. Following expert enquiries, however, it was decided that schools should be established having a syllabus and school texts which take account of the social and cultural background of the Aborigines. In these schools there is a shift of emphasis from theoretical to practical subjects, but where progress warrants it, the child transfers to the ordinary curriculum leading to the general community schools. A transitional school system has also been established, and one of its main objectives is to provide a bridge between the special schools and the community high schools.

Fifty-six special schools for Aboriginal children had been established by the middle of 1968. Forty-two of these were conducted by the Administration, ten by missions and four by the managements of pastoral properties. Government subsidies were provided to the missions and pastoral managements concerned. Nineteen pre-school centres had also been established. Fourteen of these were conducted by the Administration and five by the missions.

Community schools

Since February 1968 the Commonwealth Minister of Education and Science has been responsible for community education in the Northern Territory. His Department is represented in Darwin by an officer holding the rank of Director. Community schools are operated by the Commonwealth under an agreement with the South Australian Department of Education which provides teachers and curricula and is represented in Darwin by a Director, Northern Territory Schools. At 30 June 1968 there were twenty-six government schools in the Territory, with 8,091 pupils, and five non-government schools, with 1,214 pupils, providing instruction according to the South Australian curriculum. High schools have been established with classes to matriculation level at Darwin and to leaving certificate level at Alice Springs.

All children who live more than ten miles from an established school receive an allowance of up to $310 ($250 plus $120 on a graduated scale according to family income) per annum plus fare concessions if they board away from home in order to attend school. Limited numbers of special Northern Territory secondary and tertiary scholarships supplement the normal Commonwealth scholarship provisions. The secondary scholarship provides a benefit of $100 per annum; the tertiary awards cover the costs of tuition and other compulsory fees. There are also book allowances ranging from $16 to $20 per annum for secondary students. Approximately 300 children receive correspondence education under the South Australian Correspondence School system. Where a governess is employed or where domestic help is engaged to enable a mother to supervise correspondence lessons, an allowance of up to $100 is payable for each correspondence school pupil up to the age of twelve. The radio session 'School of the Air' supplements normal correspondence instruction for certain children in isolated areas.

Fourteen pre-school centres are in operation in the Territory, with an enrolment of 947 pupils. A number of scholarships are offered each year for training as pre-school teachers.

Theoretical training of apprentices

The recognition that technical school training is an extension of workshop training has led to the introduction of day-time classes which apprentices attend without loss of pay. Apprentices are directed by the Apprentices Board to undertake correspondence courses conducted by the Technical Correspondence School of the South Australian Education Department and the Sydney Technical College, these courses covering the work prescribed for the various trades in South Australia and New South Wales.

Assistance to Aborigines

Reserves for Aborigines comprise a total area of 94,196 square miles. While few Aborigines now live outside settled areas and not all choose to live on reserves, this large area of reserved land has been maintained to provide economic resources from which the Aborigines may benefit, either through the grant of legal title and other rights or from royalty payments. Royalties from mining operations on Aboriginal reserves are levied at double the normal rate and are paid into the Aborigines Benefits Trust Fund which was established in 1952. The fund was later extended to include royalties from timber taken from reserves.

An intensive welfare programme to prepare Aborigines for the demands of modern living is being carried out, and nineteen Government settlements and fourteen mission stations have been established where Aborigines are assisted to adopt a settled way of life. Health services (including infant clinics), education, housing, vocational training and employment are provided, and Aborigines are encouraged to take part in the social activities of the community.

Financial and technical assistance is available to Aborigines who wish to develop their own commercial or industrial enterprises. Financial assistance is available through the Aborigines Benefits Trust Fund controlled by the Minister for the Interior and the Capital Fund for Aboriginal Enterprises controlled by the Minister in Charge of Aboriginal Affairs. Policy is to ensure that any assisted enterprise has sound economic prospects and that all Aborigines with a possible interest in the venture are considered.

Finance

Details of receipts and expenditure of the Territory for the years 1963–64 to 1967–68 are shown in the table following. In this table the receipts and expenditure of the Northern Territory have been classified into a National Accounts form. The table covers transactions relating to the Northern Territory in the Commonwealth Consolidated Revenue Fund and the following trust funds: Northern Territory Government Settlements Canteens, Northern Territory Housing Commission, Northern

Territory Housing Loans, and Northern Territory Transport. Details of the financial transactions of the Darwin City Council are also incorporated in the table. Revenue derived by the Commonwealth from income taxes, customs duties, etc. levied in the Northern Territory and expenditure by the Commonwealth in the Northern Territory on such items as defence, civil aviation, railways, etc., and payments to residents from the National Welfare Fund are not included.

NORTHERN TERRITORY: RECEIPTS AND EXPENDITURE, 1963-64 TO 1967-68
($'000)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
RECEIPTS					
Taxation—					
Stamp duties	42	42	53	55	74
Motor registration	188	213	237	273	321
Other	362	435	480	656	320
Interest, rent, etc.	694	758	856	963	1,228
Public enterprises income	452	426	801	1,243	1,080
Net sale of local and semi-governmental securities	418	392	227	—6	—239
Other receipts—					
Net charge to Commonwealth budget	29,426	32,538	38,978	50,590	53,170
Other(*a*)	42	−36	−267	—114	921
Total receipts	**31,624**	**34,768**	**41,367**	**53,659**	**56,875**
EXPENDITURE					
Net current expenditure on goods and services—					
Law, order and public safety	412	460	524	576	677
Education	972	1,223	1,472	1,641	1,954
Public health and welfare	5,994	6,802	6,618	8,021	9,909
Other	7,574	8,406	10,683	12,473	13,342
Capital expenditure on new assets and stocks—					
Roads	3,720	2,950	4,514	4,727	9,357
Housing	2,130	3,850	5,161	5,341	4,118
Other	9,680	10,016	11,780	20,374	16,617
Net purchase of existing assets(*b*)	−122	−114	−328	—1,323	—1,571
Cash benefits	228	271	300	316	369
Subsidies	264	260	360	242	261
Interest paid	80	112	118	124	466
Net advances—					
Housing	546	110	−141	782	937
Other	146	422	301	357	438
Grants towards Private Capital Expenditure	..	..	5	7	..
Total expenditure	**31,624**	**34,768**	**41,367**	**53,659**	**56,875**

(*a*) Includes movements in cash, investments, etc. (*b*) Minus sign (−) denotes excess of receipts (from sales) over expenditure on, or purchases of, existing assets, including housing.

THE AUSTRALIAN CAPITAL TERRITORY

General description

The Commonwealth Constitution provides that the Seat of Government of the Commonwealth shall be in the State of New South Wales but distant not less than 100 miles from Sydney. After a number of alternative sites were considered, an area of 911 square miles lying approximately 200 miles south-west of Sydney was transferred to the Commonwealth as from 1 January 1911. A further 28 square miles at Jervis Bay were transferred as from 4 September 1915 to serve as a port for the Territory.

The primary responsibility for administering the Australian Capital Territory lies with the Department of the Interior, whose functions include housing, police, and municipal services. Education, public health, justice and the provision of basic physical services, including water supply, sewerage and roads, are the responsibility of the Departments of Education and Science, Health, Attorney-General's, and Works. The National Capital Development Commission has the responsibility for the planning and development of the Canberra city area.

The Australian Capital Territory Advisory Council was established in 1930. It has eight elected members and a representative from each of the Departments of Interior, Works, and Health, and the National Capital Development Commission. The Council advises the Minister for the Interior on matters affecting the Australian Capital Territory. Ordinances are submitted in draft form to the Council for advice and comment before being implemented.

At the census of 30 June 1966 the population of the Australian Capital Territory was 96,013, made up of 92,308 in the Canberra metropolitan area and 3,705 in rural areas (including Jervis Bay). The estimated population of the Territory at 31 December 1968 was 60,600 males and 56,600 females, 117,200 persons. *See also* the chapters Population and Vital Statistics.

National Capital Development Commission

The *National Capital Development Commission Act* 1957–60 provides for a Commission to undertake and carry out the planning, development and construction of the City of Canberra as the National Capital of the Commonwealth. The year 1967–68 was the tenth year of the Commission's operations. Construction work was carried out by means of agency arrangements with the Department of Works and private consultants. Details of the expenditure by the Commission in each year from 1963–64 to 1967–68 are included in the table on page 1155. Total expenditure in 1967–68 was $45.9 million, comprising national works $3.6m, Commonwealth offices $7.0m, Territory works $23.4m, land development $7.5m, city works $2.5m, and others $1.9m.

The following major works were completed during 1968 by the Commission and its agents: Corin Dam, Bendora Gravity Main, National Library, Russell Building No. 9, Phillip Offices Stage 1, Dickson Traffic Centre, Aranda (Canberra) High School, Dickson High School extensions, Aranda Primary School, Mawson Primary School, Cook Primary School, Parkes Place Development Stage 1, Woden Town Centre—Services, Woden Parkway Stage 2 and Belconnen Way.

Works under construction at the beginning of 1969 included the following projects: The Treasury Stage 3, Russell Building No. 14, Phillip Offices Stage 2, Australian War Memorial extensions, Dickson District Library, Melrose High School, Lyneham High School extensions, Farrer Primary School, Garran Opportunity 'F' School, Page Primary School, Scullin Primary School, Hindmarsh Drive Stage 2, Adelaide Avenue Duplication, Commonwealth Avenue/Parkes Way Interchange, Sturt Avenue Duplication and Belconnen Water Pollution Control Centre.

Works and services

Housing

Until the period following the 1939–45 War most houses and flats in Canberra were built and rented by the Department of the Interior. More recently, an increasing number of houses and flats have been built by private enterprise, and as a result the proportion of houses and flats in Canberra occupied by tenants of the Department of the Interior has fallen from 79.7 per cent of total occupied houses and flats in 1954 to 58.3 per cent in 1961 and 38.8 per cent in 1966. Although the bulk of rented accommodation is provided by public authorities and will continue thus in the foreseeable future, there has been a considerable increase in the proportion of home ownership in Canberra, since 1954. The proportion of houses and flats owned or being purchased by instalments has risen from 19.5 per cent in 1954 to 29.0 per cent in 1961 and 45.6 per cent in 1966. In June 1966, 39.7 per cent of the total occupied dwellings in Canberra were owned by the Department of the Interior, and in June 1967, 37.7 per cent. Home building activity in the Woden Valley, south-west of the former city area, has continued to expand, and at June 1967 there were 4,682 occupied dwellings in this area. *See also* the chapter Housing and Building.

Municipal services

Canberra has been developed as a garden city. More than three million trees and many acres of lawns have been planted since 1927. The development of new areas of parkland and the maintenance of existing tree and lawn areas is the responsibility of the Parks and Gardens Branch of the Department of the Interior. Municipal services are also provided by the Department of the Interior.

At 30 June 1968, 27,982 meters were connected to the city water supply, drawn through nine service reservoirs from three storages on the Cotter River with a total capacity of nearly 20,000 million gallons. In 1967–68 some 4,797 million gallons of water were consumed in Canberra, and in addition the system supplied 367 million gallons to Queanbeyan in New South Wales. Treatment works at Weston Creek dispose of Canberra sewage. At 30 June 1968, 462 miles of sewers, 6½ miles of rising sewerage mains and 491 miles of storm water drains were laid.

Department of Works

Apart from the work it carries out for the National Capital Development Commission, the Department of Works acts as design and supervision agent for other Commonwealth departments and instrumentalities. Total expenditure during 1967–68 on all operations amounted to $10.7 million ($10.6 million in 1965–66), comprising: building works—housing $168,163, other building $3,852,826; engineering works $1,404,177; repairs and maintenance—building $2,334,573, engineering $2,784,719, purchase of plant $174,247. Major work completed during 1967–68, excluding those works on behalf of the National Capital Development Commission, included the Weetangerra (now Scullin) Telephone Exchange, C.S.I.R.O. L.R.R.S. Building Stage 2, Hospital alterations Stages 2 and 4, and the A.N.U. Research Clinic Hospital.

New major works under construction at the close of 1967–68 included Belconnen 'A' Post Office, Visitors Reception Centre at Tidbinbilla, Extensions and alterations to Tharwa School, the erection of C.M.F. Depot, City and the new Terminal Building at the Canberra Airport.

Production

See also the chapters dealing with particular subjects.

Lands

Reference has been made in earlier issues of the Year Book to the general conditions of land tenure in the Territory and to the area of alienated and leased land, and the chapter Rural Industry of this issue contains statistical information on the subject. (*See also* § 1. Canberra: Fifty Years of Development, page 123 of Year Book No. 49.)

Under the *Seat of Government* (*Administration*) *Act* 1910–1965, no Crown lands in the Territory may be sold or disposed of for any estate in freehold except in pursuance of some contract entered into before the commencement of the Act. In general, leases of land in the city area are granted under the *City Area Leases Ordinance* 1936–1968. In special circumstances land may be leased for purposes other than business or residential under the *Leases* (*Special Purposes*) *Ordinance* 1925–1953 and for church purposes under the *Church Lands Leases Ordinance* 1924–1966. As considerable areas of Commonwealth owned land in the Territory are not immediately required in connection with the establishment of the City, they have been leased for agricultural or grazing purposes for terms consistent with the anticipated growth of Canberra under the *Leases Ordinance* 1918–1966. Some lands in the Territory, in areas generally remote from the City, remain in private ownership under Freehold Title.

The Commonwealth Territory at Jervis Bay, comprising about 28 square miles, was acquired from New South Wales for the possible provision of port facilities in connection with the Australian Capital Territory. A portion of the area is occupied by the Royal Australian Naval College (H.M.A.S. *Creswell*) and a Royal Australian Navy airfield. Several blocks fronting Sussex Inlet have been leased for guest houses and holiday camps, etc., under the *Leases Ordinance* 1918–1966. Apart from picnic and camping areas, experimental planting, afforestation and soil conservation activities, the remainder of the area is being maintained in its natural state.

Forestry

Forestry operations in the Territory were begun on Mount Stromlo in 1915. Plantings up to 1925 were chiefly decorative, but since then a much wider programme has been undertaken. In 1926 a comprehensive review was made of the Territory's potential for forest development, and a programme for the development of commercial forests was approved. Most of the better native forest has since been placed under management, and, following survey and assessment work, forestry operations, including fire-control, have been extended to 100,000 acres of eucalypt forest in the lower Cotter Catchment Area.

Afforestation work has also been undertaken, and softwood plantations (mainly *Pinus radiata*) have been established at Uriarra, Stromlo-Green Hills, Pierce's Creek, Kowen, Tidbinbilla, Jervis Bay and Boboyan. Experimental plots have been established at Jervis Bay and in the Brindabella Ranges, and soil conservation plantings made at various locations throughout the Territory. The total area of softwood plantations within the Australian Capital Territory at 30 June 1969 was 29,800 acres, of which 27,200 acres were *Pinus radiata*, the balance consisting chiefly of *Pinus ponderosa* and *Pinus nigra*, plus 720 acres at Jervis Bay, mainly *Pinus radiata* and *Pinus elliottii*.

Continued thinning operations have improved all Australian Capital Territory forests so that they now yield a wide variety of products. Board-logs and case timber form the bulk of production, but some poles, fencing timber, and pulpwood are now being produced. The yearly output from pine plantations has increased from 2,500 cubic feet in 1930–31 to 1.5 million cubic feet in 1968–69, valued at $394,000 delivered at purchasing mills in Canberra. There was no hardwood log production in 1968–69. Up to 30 June 1969 a total of 23.3 million cubic feet of pine logs had been cut from plantations, while hardwood production from the Australian Capital Territory, including Jervis Bay, remained at 4.3 million cubic feet.

Agricultural, pastoral and secondary industries

During 1967–68 the production of the more important items of the agricultural and pastoral industry was: wheat 41,602 bushels; wool 2,238,000 lb; whole milk 1,998,000 gallons; meat (carcass weight), fresh 3,862 tons. The numbers of livestock depastured at 31 March 1968 were: horses 722; cattle 12,548; sheep 267,078.

As in the Northern Territory, the secondary industries established in the Australian Capital Territory are largely the service industries associated with the growth of the Territory.

AUSTRALIAN CAPITAL TERRITORY: FACTORIES, 1963-64 TO 1967-68

		1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Number of factories(*a*)		170	187	217	238	241
Average number of employed(*b*)—						
Males		2,236	2,634	2,896	2,992	3,002
Females		458	593	599	639	708
Persons employed		*2,694*	*3,227*	*3,495*	*3,631*	*3,710*
Salaries and wages paid(*c*)—						
Males	$'000	5,666	7,854	8,819	9,306	9,936
Females	,,	607	848	1,047	1,177	1,315
Total salaries and wages paid	,,	*6,273*	*8,702*	*9,866*	*10,483*	*11,251*
Value of power, fuel, etc., used(*d*)	,,	502	644	760	735	827
Value of materials used(*e*)	,,	8,428	11,440	13,349	14,918	16,119
Value of production(*f*)	,,	11,097	14,060	17,418	18,860	19,257
Value of output(*g*)	,,	20,026	26,145	31,528	34,514	36,203
Value of land and buildings(*h*)	,,	11,669	20,583	21,891	22,779	23,377
Value of plant and machinery(*h*)	,,	5,103	9,682	10,134	10,368	10,012

(*a*) Any factory, workshop or mill in which four or more persons are employed or power other than hand is used. (*b*) Average over whole year; includes working proprietors. (*c*) Excludes amounts drawn by working proprietors. (*d*) Includes water and lubricating oil. (*e*) Includes also containers, etc., tools replaced and repairs to plant. (*f*) Value added in process of manufacture (i.e. value of output less value of materials and fuel used). (*g*) Value of goods produced including amounts received for repair work and other work done. (*h*) Depreciated or book values at end of year including estimated value of rented premises and machinery.

Transport and communication

Canberra is connected with the railway system of New South Wales at Queanbeyan by a line 5 miles long. This line was opened for goods traffic on 25 May 1914 and for passenger traffic on 15 October 1923. Direct or linking services operate between Canberra and Sydney and Canberra and Melbourne. Two airlines provide many services daily each way on the Sydney-Canberra-Melbourne route. Regular motor-coach services link Canberra with towns in New South Wales, Victoria and South Australia. The total length of roads in the Territory at 30 June 1968 was: bitumen and concrete, 535 miles; gravel, 213 miles; other formed roads, 78 miles; total, 826 miles. There are three radio broadcasting stations in the Territory, 2CY and 2CN of the national broadcasting system and 2CA, a commercial station, and two television stations, ABC Channel 3 of the national broadcasting system and CTC Channel 7, a commercial station.

Social

See also the chapter Education, Cultural Activities and Research.

Education

The *Education Ordinance* 1937–1966 provides for the compulsory attendance at school of children between the ages of six and fifteen years. The Commonwealth Department of Education and Science is primarily responsible for the education of children in the Australian Capital Territory. By agreement, however, the New South Wales Department of Education arranges the teaching programme in accordance with its own curriculum and provides the teaching staff. It is reimbursed for expenses incurred.

At 30 June 1969 there were nine public secondary schools in Canberra providing courses proceeding to the Higher School Certificate. Thirty schools provided courses at infants and primary levels, three of these being in rural districts and one in the Jervis Bay area. There were also: a school for mentally handicapped children; a school for physically handicapped children, located at Canberra Community Hospital; classes for deaf children, located at Ainslie and Mawson primary schools; classes for O.A. children located at Ainslie, Mawson and Narrabundah primary schools; a therapy clinic for children with speech defects; and a clinic for educational guidance. A further four primary schools, one secondary school and a school for moderately handicapped children are scheduled to commence at the beginning of the 1970 school year.

At 30 June 1969 there were twenty private schools in Canberra. Of these, St Edmund's Christian Brothers' College, the Catholic Girls' High Schools at Braddon and Griffith, the Daramalan College, the Canberra Grammar School (Boys), and the Canberra Church of England Girls' Grammar School provide courses leading to the Higher School Certificate.

Forty pre-school centres, including one in the Jervis Bay area and a mobile unit which visits outlying areas of the A.C.T. provide pre-school facilities for approximately 2,700 children between the ages of three and five years. Pre-school education is also provided for deaf children and in 1970 the Commonwealth will provide for the pre-school education for moderately mentally handicapped children.

The Canberra Technical College, which follows generally the curriculum set by the New South Wales Department of Technical Education, provides trade, post-trade, certificate, and some hobby courses. At 30 September 1968 the Technical College provided instruction in one hundred courses in twenty-one different schools of study. Student enrolments at 30 September 1968 were 5,956.

The Canberra School of Music provides a Diploma Course and individual study in a range of instruments and voice. At the end of June 1969, enrolments totalled 580.

An area of about 250 acres has been set aside at Acton for the Australian National University. Provision has been made for the University to establish such research schools as may be thought desirable, including a School of Medical Research and Research Schools of Physical Sciences, Social Sciences and Pacific Studies. Provision for undergraduate studies and some post-graduate study is made by the School of General Studies.

A College of Advanced Education has been established in Canberra and permanent buildings are being erected.

Health

The Canberra Community Hospital serves the population of Canberra and surrounding districts. At 30 June 1968 it had 576 beds, an honorary medical staff of 134, 20 salaried medical staff, and a nursing staff of 624. For further information *see* the chapter Public Health in this Year Book and in Year Book No. 53.

Justice

The Australian Capital Territory has a Supreme Court and a Court of Petty Sessions. There is an Australian Capital Territory Police Force, which at 30 June 1969 numbered 288, including 5 policewomen. Of the total, 114 were engaged on general duties, including 1 at Jervis Bay and 2 caring for the Police Boys Club; the traffic branch comprised 66, including the specialist water police and accident investigation squads, 30 were engaged in criminal investigation, 21 in recruitment and training, 55 in planning and research and 2 in the special branch. *See also* the chapter Public Justice.

Finance

In the following table the receipts and expenditure of the Australian Capital Territory have been classified in a National Accounts form. The table covers transactions relating to the Australian Capital Territory in the Commonwealth Consolidated Revenue Fund and the following trust funds: Australian Capital Territory Electricity Supply (1962–63), Australian Capital Territory Forestry, Australian Capital Territory Housing, and Australian Capital Territory Transport. In addition, details of the financial transactions of the following semi-governmental authorities are also covered: Australian Capital Territory Electricity Authority, Commonwealth Brickworks, National Capital Development Commission, and Canberra Theatre Trust. Revenue derived by the Commonwealth from income taxes, sales tax, etc., levied in the Australian Capital Territory and expenditure by the Commonwealth in the Australian Capital Territory on such items as defence, civil aviation, railways, etc., and payments to residents from the National Welfare Fund are not included.

AUSTRALIAN CAPITAL TERRITORY: RECEIPTS AND EXPENDITURE 1963–64 TO 1967–68

($'000)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
RECEIPTS					
Taxation—					
Motor registration	474	540	604	669	760
Liquor tax	129	146	170	197	225
Other	295	698	199	831	755
Interest, rent, etc.	868	1,256	1,631	1,963	2,035
Public enterprises income	4,718	5,714	6,143	6,776	8,156
Net sale of semi-governmental securities	768	608	225	533	708
Other receipts—					
Net charge to Commonwealth budget	37,342	40,008	46,516	57,696	62,655
Other(*a*)	−660	−514	151	2,122	1,114
Total receipts	**43,934**	**48,456**	**55,638**	**70,787**	**76,407**
EXPENDITURE					
Net current expenditure on goods and services—					
Law, order and public safety	422	528	700	926	1,049
Education	3,060	4,044	4,451	5,254	6,207
Public health and welfare	1,746	2,310	2,992	3,977	4,535
Other	4,478	5,764	6,857	7,689	8,500
Capital expenditure on new assets and stocks—					
Education	2,367	2,772	3,507	4,652	4,770
Cultural and recreational facilities	2,423	2,910	2,755	3,574	4,214
Public health and welfare	2,148	2,584	1,950	1,090	250
Water supply and sewerage	920	2,822	3,395	11,625	10,393
Roads and bridges	5,388	6,450	10,156	9,946	11,342
Power, fuel and light	1,256	1,346	1,675	3,188	2,819
Housing	6,602	7,724	8,814	6,637	7,235
Other	14,074	11,830	10,281	8,839	11,837
Net purchase of existing assets(*b*)	−11,714	−17,340	−12,326	−7,462	−7,801
Cash benefits	38	50	134	139	144
Interest paid	212	186	257	260	271
Net advances for housing	10,514	14,400	9,801	10,281	10,641
Grants towards private capital expenditure	. .	76	237	170	. .
Total expenditure	**43,934**	**48,456**	**55,638**	**70,787**	**76,407**

(*a*) Includes movements in cash, investments, etc. (*b*) Minus sign (−) denotes excess of receipts (from sales) over expenditures on, or purchases of, existing assets, including housing.

NORFOLK ISLAND

General description

Norfolk Island, discovered by Captain Cook in 1774, is situated in latitude 29°S., longitude 168° E. approximately. Its total area is approximately 14 square miles, the island being about 5 miles long and 3 miles wide. It is 1,035 miles from Sydney and 660 miles from Auckland. The length of the coast line is 20 miles, and its form that of an irregular ellipse. Except for a portion on the south side and the landing place at Cascade on the northern side, almost inaccessible cliffs rise from the water's edge. The climate is equable, the temperature ranging between 45° and 81°F. with a mean of 68°F. The average annual rainfall is 56 inches.

After serving as a penal station from 1788 to 1813 and from 1825 to 1855, Norfolk Island in 1856 became the home of the remaining descendants of the *Bounty* mutineers. The estimated population at 30 June 1968 was 1,440.

Administration

In 1856 the island was created a distinct and separate settlement under the jurisdiction of New South Wales. In 1896 it was made a dependency under the Governor of that Colony, and finally, by the passage of the *Norfolk Island Act* 1913, it was accepted by the Commonwealth Parliament as a Territory of Australia. It is controlled by the Minister for External Territories through an Administrator. The Norfolk Island Council is established pursuant to the *Norfolk Island Act* 1957–1966 and is constituted in accordance with the provisions of the *Norfolk Island Council Ordinance* 1960–1964. The Council may consider and tender advice to the Administrator on any matter affecting the peace, order and good government of Norfolk Island, and must be consulted on certain legislative and financial matters. The Council comprises the Administrator as *ex officio* chairman and voting member and eight members elected biennially.

Economic activity

The major economic activities of the island are the tourist trade, primary production, and Government instrumentalities.

Primary industries. The soil on the island is particularly fertile, the climate equable and the rainfall fairly evenly distributed except for a pronounced dry period in November. This enables a wide range of temperate and semi-tropical products to be cultivated. However, the island's comparative isolation presents trading difficulties, and production of bean seed, formerly the major export, has declined rapidly since 1962–63.

Fish abound off the island. In the past a number of ventures have been formed to exploit this resource, but they have been short-lived, mainly because of the lack of a sheltered harbour. A modern whaling station was started on the island in 1955, and production commenced during the second half of 1956. Owing to a marked scarcity of whales after 1961, however, the station was closed down.

An active forestry programme is being carried out to increase the resources of Norfolk Island pine and to introduce suitable types of eucalypts.

Tourists. Regular sea and air services to the island are available for those who seek a quiet holiday in surroundings of beauty and historic interest. There are at present, apart from flats and unlicensed guest houses, nine hotels and licensed guest houses, and further accommodation is being built to meet the steadily increasing number of visitors.

Employment. A large proportion of the population derives its income from various aspects of the tourist industry including the operation of hotels and duty-free stores. The Commonwealth Government provides services through staff from the Departments of Civil Aviation and Interior (Meteorological Branch) and teachers are seconded by the N.S.W. State Education Department. A number of clerical and other positions are available to islanders in the Norfolk Island Administration. Very few people rely for their income entirely on agricultural pursuits.

Trade, transport and communication

Imports to Norfolk Island since the 1939–45 War have risen from $65,000 in 1945–46 to $2,221,000 in 1967–68. In 1967–68 the major proportion ($1,291,810) came from Australia, while New Zealand and the Pacific Islands supplied $358,000. Exports rose from $18,500 in 1945–46 to $420,000 in 1960–61, but had declined to $235,200 by 1967–68, after whaling had ceased in 1962–63. Exports to Australia, the principal market, amounted to $172,800, while exports to New Zealand and to Pacific Islands amounted to $45,900. No duties are chargeable on goods imported into Australia from Norfolk Island if the goods are the produce or manufacture of Norfolk Island, shipped direct to Australia, and not goods which if manufactured or produced in Australia would be subject to excise duty.

A shipping service to the island is maintained at approximately six-week intervals from Sydney via Norfolk Island to the New Hebrides and Solomon Islands, and thence back to Brisbane and Sydney. A service linking Sydney and Noumea includes a call at Norfolk Island on the outward voyage about every three weeks. Shipping between the island and New Zealand is infrequent.

A passenger and air freight service between Sydney and Norfolk Island is operated by Qantas Airways Ltd twice a week, and more frequently in peak periods. The service extends to New Zealand under charter to Air New Zealand Ltd.

There are approximately fifty miles of motor road on the island. As a substantial section of the population possesses private motor cars, and taxi-cab and bus services are available, transport is almost exclusively by motor vehicle.

A limited telephone service is operated during business hours with 24-hour connections to emergency services. The Overseas Telecommunications Commission provides a radio telegram service to Sydney. A local broadcasting service is operated by the Administration.

Education

Education is free and compulsory up to the age of fifteen years. The school, which is conducted by the New South Wales Department of Education, conforms to the Australian standard of public education, ranging from kindergarten to the School Certificate examination. The teachers are provided by the New South Wales Education Department, but they are paid by the Norfolk Island Administration. The number of scholars enrolled at 30 June 1968 was 276.

Judiciary

The judicial system of Norfolk Island consists of a Supreme Court and a Court of Petty Sessions. The Supreme Court is the highest judicial authority in the Territory and is a superior court of record with original criminal and civil jurisdiction. The jurisdiction of this Court is exercised by one judge sitting in Court or, to the extent and in the cases provided by or under ordinance, sitting in Chambers. The jurisdiction of the Court of Petty Sessions is exercised by a Chief Magistrate or any three magistrates other than the Chief Magistrate.

Finance

The revenue of the Territory, together with an annual grant from the Commonwealth Government for administrative expenses, is paid to the credit of the Norfolk Island Trust Fund, and advances for administrative and developmental expenses are drawn from the account. The principal items of revenue and expenditure for the five years 1963–64 to 1967–68 were as follows.

NORFOLK ISLAND: REVENUE AND EXPENDITURE, 1963-64 TO 1967-68
($'000)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
REVENUE					
Commonwealth subsidy	67	67	66	66	66
Customs duties	45	55	85	90	110
Sale of liquor	30	34	41	53	56
Post office	55	55	174	138	122
All other	33	33	41	50	71
Total revenue	**232**	**245**	**406**	**397**	**425**
EXPENDITURE					
Administrative	46	55	72	73	89
Miscellaneous services	20	21	22	27	20
Social expenditure	50	68	70	97	126
Repairs and maintenance	17	20	27	66	67
Capital works and services	48	55	57	126	232
Postal services	26	16	33	32	59
Other business undertakings	12	6	9	7	7
Total expenditure	**219**	**241**	**289**	**428**	**600**

PAPUA AND NEW GUINEA

The information under this heading is applicable to both the Territory of Papua and the Trust Territory of New Guinea. For details of the respective Territories *see* pages 1178 (Papua) and 1185 (New Guinea) and following pages. The sections on pages 1158–63 have been prepared by the Director of the Commonwealth Bureau of Meteorology.

General description

Geographical position

The Territory of Papua and New Guinea includes the Territory of Papua and the Trust Territory of New Guinea. The total area of approximately 180,000 square miles lies in the equatorial zone between latitudes 2° S. and 12° S. and longitudes 141° E. and 156° E. The Territory of Papua comprises south-east New Guinea and also the islands of the Trobriand, Woodlark, D'Entrecasteaux, and Louisiade groups. The Trust Territory of New Guinea extends from 2° S. to 8° S. and includes north-east New Guinea (also called 'the mainland'), Bismarck Archipelago (New Britain, New Ireland, Lavongai, Admiralty Islands), and Solomon Islands (Bougainville, Buka).

Geographical features

There is a high backbone mountain chain extending generally along the centre of the main island with coastal plains which widen in some areas, particularly in the Fly River Basin. The mountains, which are rugged, rise to 15,000 feet above sea level in some areas; the larger islands mostly have mountain backbones, some rising to about 10,000 feet. In many parts the highlands extend to the coast.

Weather and climate

The climate, particularly the rainfall, over so wide an area as Papua and New Guinea, with its numerous islands and varying elevations, presents many variations. Generally speaking, the climate is hot and humid, except in the highlands where days are mild to warm and nights are cool. Mean temperatures vary little throughout the year, and there are no winter and summer seasons comparable to those of higher latitude.

The predominant seasonal feature of the Territory is the regular alternation between two major air-streams, the south-east trade winds and north-west monsoon. The 'southeast' season prevails approximately from May to October, and the 'northwest' season persists for a shorter period from about December to early April. Two short spells of calm weather occur between these two seasons.

Rainfall

There are great spatial variations in the amount of rainfall received over the Territory of Papua and New Guinea. The variations depend mainly upon the direction and speed of the air streams. These streams are moist, requiring only a small amount of lifting for condensation of water vapour to occur. Topography therefore has a dominating influence on the rainfall distribution.

Average annual rainfall

The table on page 1160 shows the average annual and monthly rainfalls for selected stations in the Territory. It may be seen that the spatial distribution of average annual rainfall varies greatly, being dependent mainly on topography in relation to prevailing winds. The annual averages vary from 39 inches at Port Moresby to 227 inches at Kikori at the head of the Gulf of Papua. There are few rainfall observing stations above 6,000 feet, so that rainfall above that height must generally be estimated. The map facing page 1184 shows the rainfall distribution over the region for the year 1967.

Seasonal distribution of rainfall

Places in Papua such as Port Moresby, where the south-east trade wind does not blow directly onshore, have a dry season during May–October. Places such as Kikori have heavier rainfall during May–October because of the onshore south-east winds. In the Territory of New Guinea, where conditions are more equatorial, rainfall occurs throughout the year, but is heaviest in the November–April period at most places.

Variability of rainfall

There are marked variations from year to year in annual rainfall totals throughout the Territory. At Port Moresby, for example, in forty-two years of record the annual rainfall has varied from 72 inches to 23 inches; at Daru in fifty-two years of record the annual rainfall has varied from 156 inches to 46 inches; and at Madang in thirty-eight years of record the variation has been from 180 inches to 92 inches. The table on page 1161 shows the annual rainfall at Port Moresby and Lae for the years 1946 to 1967 inclusive.

Heavy rainfalls

Highest twenty-four hour rainfall registrations have included 21.60 inches at Pondo Plantation in New Britain and 17.60 inches at Cape Nelson on the east coast of the main island. Twenty-four hour falls greater than 15 inches have been recorded at a number of other stations in the Papua and New Guinea region. The highest twenty-four hour fall recorded in Australia was 36 inches at Crohamhurst, Queensland. All these registrations were for the restricted twenty-four hour period from 9 a.m. to 9 a.m. Higher falls, possibly approaching 30 inches, have probably occurred in the Territory in unrestricted periods of twenty-four consecutive hours.

Temperature

Although the Territory has no summer and winter seasons, it has a wide range in temperature because of elevation differences. For each month the mean daily maximum temperature decreases by about 2° F. and the mean daily minimum temperature by about 4° F. for each 1,000 feet increase in elevation up to 5,000 feet.

A table on page 1161 shows temperature and humidity data for five lowland and two highland stations. Mount Hagen, elevation 5,500 feet, is the highest station for which temperature data are available. However, both day and night temperatures continue to decrease with elevation above this level.

Average seasonal temperature distribution

In the lowland areas there is a difference in temperature pattern between the areas south of the highlands and those to the north. In the south there is a tendency for temperatures to be lower in the May–October period than in the November–April period (e.g. Samarai). In the north there is little difference throughout the year (e.g. Madang). In the highlands, temperatures are appreciably lower than in the lowlands and are slightly lower in the middle of the year than they are at the beginning of the year (e.g. Goroka). The nights are cold in the highlands throughout the year; the mean daily minimum at Mount Hagen for July is 53.6° F.

Extreme temperatures

The highest air temperature recorded at Lae (in eighteen years of record) was 101.7° F. and the lowest was 66.3° F.; at Port Moresby (in twenty-two years of record) the highest was 97.3° F. and the lowest was 57.3° F.; at Mount Hagen (in thirteen years of record) the highest was 88.0° F. and the lowest 35.0° F. The mean daily range of temperature is about 15° F. at lowland stations and 20° F. at highland stations up to 5,000 feet elevation.

Humidity

Humidity is high generally throughout the year. In the lowlands persistently high humidity in association with high temperatures is responsible for the human discomfort experienced. The average index of mean relative humidity for January and July is shown for selected stations in a table on page 1161. This index has been derived from the ratio of the average 9 a.m. vapour pressure to the saturation vapour pressure at the mean temperature. Being thus related to the mean temperature, this value of relative humidity is a good approximation to the daily mean.

In the lowland areas the average index of mean relative humidity (*see* table on page 1161) is in the range 75–85 per cent throughout the year. There is little variation in the index from month to month at any station. This is in contrast with northern Australian localities where the south-east winds of the dry season result in low relative humidites. For example, Darwin's average index of mean relative humidity ranges from 81 per cent in February to 62 per cent in July.

In the highland areas up to 6,000 feet elevation the average index of mean relative humidity is within the range 70–80 per cent throughout the year. The lower temperatures experienced on the highlands relative to the lowlands result in conditions being generally more comfortable in the highlands.

Evaporation

The only evaporation data available are records for Port Moresby. These show that the mean monthly tank evaporation varies from 5-6 inches per month in the early part of the year to 6-7 inches per month in the latter part of the year. The average annual tank evaporation at Port Moresby over an eleven-year period was 73.59 inches. It is probable that evaporation is less than this value in the higher humidity areas.

Sunshine and cloud

Mean daily sunshine hours are recorded for each month at Port Moresby, and the figures show a variation from 6.2 hours per day in February and March to 8.4 hours per day in November. The mean daily amount of sunshine at Port Moresby for the year is 7.0 hours, which is significantly less than Darwin (8.4 hours) but comparable with Brisbane (7.5 hours).

At Port Moresby the mean cloud amount varies from 5.1 eighths per day in May and June to 6.9 eighths in February; at Lae the variation is from 6.1 eighths in May and June to 7.0 eighths in March. The mean daily cloud amounts for the year at Port Moresby and Lae are 5.8 and 6.5 eighths respectively, which are high in comparison with Darwin (3.1).

Winds

As mentioned previously the south-east trade winds prevail from May to October and the north-west monsoonal winds prevail from December to March over most of the region. However, the broad-scale wind pattern may be completely masked by the effects of local topography and land and sea breezes. The mean 9 a.m. and 3 p.m. wind speeds and prevailing directions are shown in the tables on pages 1162–3 for Port Moresby and Lae.

At Port Moresby the mean winds are stronger during the period May-November than during December-April; for example, the 3 p.m. mean wind for August is 15.4 m.p.h. and for March is 7.6 m.p.h. The winds at 3 p.m. are much stronger than at 9 a.m.; for example, for the year the 3 p.m. mean wind is 11.5 m.p.h. and the 9 a.m. mean wind is 4.1 m.p.h. The prevailing direction of the wind is south-east during May-November and north-north-west to south-west during December-April.

At Lae the winds are mainly lighter than at Port Moresby. In the period May-October the winds at Lae are lighter than in the period November-April. The winds at 3 p.m. are greater than at 9 a.m. except in February. The prevailing direction is north-west at 9 a.m. and south-east at 3 p.m. throughout the year.

Storms and cyclones

The Papua and New Guinea region is subject to thunderstorm activity, squall lines, and local storms throughout the year. Severe thunderstorms are frequent in the mountainous areas, but also occur in coastal lowlands. The main tropical cyclone belt lies to the south of the region, but occasionally a tropical cyclone affects the region, causing loss of life and property.

Climatological tables

The averages and extremes for a number of elements recorded at Port Moresby and Lae are given in the tables on pages 1162–3. These tables generally follow the format given for Australian capital cities included in Chapter 2 of this Year Book, the observational data being for available years of record to 1966 inclusive unless otherwise stated. Some elements included in the Australian capital city tables have been omitted from the tables for Port Moresby and Lae because of the inadequacy of observational records.

TERRITORY OF PAPUA AND NEW GUINEA: AVERAGE MONTHLY AND ANNUAL RAINFALL FOR SELECTED STATIONS(*a*)

(Inches)

Station (*lat., long.*)	*Years of record*	*Jan.*	*Feb.*	*Mar.*	*April*	*May*	*June*	*July*	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*	*Ye*
Bwagaoia(*b*) (10° 41′ 152° 51′)	30	9.82	12.56	10.34	11.14	11.89	9.05	7.35	8.70	9.14	10.10	10.39	8.95	119.
Daru(*b*) (9° 04′ 143° 12′)	52	10.93	10.05	12.74	13.00	8.84	3.91	3.70	2.08	1.64	2.28	4.54	7.93	81.
Dogura(*b*) (10° 00′ 149° 55′)	38	8.69	8.30	8.63	6.03	3.73	3.79	3.10	2.60	3.09	2.75	3.59	4.49	58.
Gobaragere(*b*) (9° 50′ 47° 45′)	33	7.43	6.98	7.85	8.56	4.30	3.49	1.66	2.17	2.37	3.07	5.12	6.88	59.
Gusoeta(*b*) (8° 32′ 151° 04′)	33	15.58	16.45	15.69	14.23	13.04	12.67	12.51	12.33	11.51	9.69	11.37	10.88	155.
Itikimuna(*b*) (9° 25′ 147° 29′)	30	12.92	11.07	14.21	15.30	10.15	7.08	4.88	7.18	7.93	11.27	13.00	13.18	128.
Kairuku(*b*) (8° 51′ 146° 32′)	33	9.20	10.35	8.64	5.33	1.69	1.92	1.15	0.67	1.65	1.66	2.44	5.88	50.
Kerema(*b*) (7° 57′ 145° 46′)	39	9.47	8.34	10.47	11.49	16.71	16.35	13.71	14.26	13.61	11.52	8.46	7.75	142.
Kikori(*b*) (7° 25′ 144° 15′)	39	12.05	12.95	14.10	17.40	29.35	28.14	25.48	22.16	23.74	17.07	13.19	11.50	227.
Kokoda(*b*) (8° 58′ 147° 43′)	31	12.30	14.09	14.30	14.14	9.93	7.06	7.55	9.58	10.17	12.20	16.70	14.16	142.
Kokopo(*c*) (4° 20′ 152° 15′)	30	8.30	7.05	9.05	6.85	4.73	5.13	6.44	6.25	3.94	4.50	6.50	9.18	77.
Kwikila(*b*) (9° 44′ 147° 44′)	35	6.49	5.14	6.46	6.56	3.45	2.28	1.76	1.79	2.24	1.75	2.64	4.19	44.
Lindenhafen(*c*) (6° 15′ 150° 30′)	30	6.66	5.82	6.39	11.23	22.71	31.60	41.00	43.56	31.82	19.32	11.85	7.42	239.
Madang(*c*) (5° 13′ 145° 47′)	38	12.98	12.07	14.96	17.11	14.71	9.70	7.41	5.04	5.91	10.16	14.77	14.59	139.
Port Moresby(*b*) (9° 28′ 147° 09′)	42	6.92	7.56	6.73	4.08	2.56	1.23	1.07	0.63	1.01	1.35	1.87	4.17	39.
Samarai(*b*) (10° 37′ 150° 40′)	39	6.58	7.06	9.77	10.47	11.80	12.44	8.48	8.19	11.06	8.50	7.89	5.40	107.

(*a*) With thirty or more years of record to 1964. (*b*) Papua. (*c*) New Guinea.

RAINFALL: PORT MORESBY AND LAE, 1946 TO 1967

Year	Port Moresby (Papua)		Lae (New Guinea)	
	Amount	No. of days	Amount	No. of days
	in		in	
1946	61.79	137	(a)168.64	(a)248
1947	40.61	154	180.37	261
1948	45.82	138	179.26	267
1949	43.20	164	174.78	275
1950	47.67	137	158.51	251
1951	45.51	108	191.59	250
1952	54.88	150	165.58	274
1953	36.20	126	197.76	264
1954	46.49	118	173.70	277
1955	39.33	128	155.26	261
1956	56.60	141	122.39	233
1957	51.89	129	238.66	282
1958	46.02	107	190.02	250
1959	41.65	126	185.78	245
1960	34.17	116	167.50	260
1961	42.75	136	193.09	267
1962	43.98	133	182.84	261
1963	58.76	138	165.18	254
1964	55.02	151	163.10	244
1965	40.73	103	175.93	265
1966	41.25	116	206.19	291
1967	57.05	147	198.86	263

(a) Incomplete for July and August.

TERRITORY OF PAPUA AND NEW GUINEA: TEMPERATURE AND RELATIVE HUMIDITY FOR SELECTED STATIONS

Station	Lat.	Long.	Altitude (ft)	Years of record	Temperature °Fahr.				Relative humidity			
					Mean max. Jan.	Mean max. July	Mean min. Jan.	Mean min. July	Av. index of mean Jan. (a)	Av. index of mean July (a)	Mean 3 p.m. Jan.	Mean 3 p.m. July
Daru(b)	9° 04′	143° 12′	26	1940–1966	89.0	82.6	75.2	73.0	84	83	..	..
Goroka(c)	6° 04′	145° 24′	5,200	1952–1966	78.5	76.7	59.0	56.2	75	72	56	52
Kikori(b)	7° 25′	144° 15′	30	1917–1965	90.5	81.4	73.5	71.9	83	91	..	..
Madang(c)	5° 13′	145° 47′	14	1951–1966	86.4	85.2	73.7	72.9	85	87	76	75
Mount Hagen(c)	5° 51′	144° 09′	5,500	1953–1965	76.2	73.8	55.9	53.6	79	80	(d)65	(d)69
Samarai(b)	10° 37′	150° 40′	50	1956–1966	88.3	80.6	76.5	73.3	81	85	74	81
Wewak(c)	3° 35′	143° 40′	15	1956–1966	86.8	86.4	73.4	72.7	83	85	75	74

(a) *See* text, page 1159, for explanation of this index. (b) Papua. (c) New Guinea. (d) 1955–65.

CLIMATOLOGICAL DATA: PORT MORESBY (PAPUA)

(Jackson's Strip, Lat. 9° 26′ S., Long. 147° 13′ E., Height above M.S.L. 92 ft)

BAROMETER, WIND, EVAPORATION AND CLOUD

Month	*Bar. corrected to 32° F. mn sea level and standard gravity from 9 a.m. and 3 p.m. readings (m.bars)*	*Wind*					*Mean amount evaporation (in)*	*Mean amount of clouds, 9 a.m., 3 p.m., 9 p.m.(a)*
		Average miles per hour		*Highest gust speed (mph)*	*Prevailing direction*			
		9 a.m.	*3 p.m.*		*9 a.m.*	*3 p.m.*		
No. of years of observations	21	5	5	15	5	5	11	17
January	1,007.1	3.4	8.3	55	NNW	SW	6.17	6.7
February	1,007.0	3.9	9.3	52	N	SW	5.14	6.9
March	1,007.4	2.6	7.6	49	N	W	5.47	6.7
April	1,008.0	1.7	7.7	40	NNW	SSE	4.92	6.2
May	1,008.5	3.3	10.8	43	SE	SSE	5.43	5.1
June	1,009.7	5.7	13.0	46	SE	SSE	5.46	5.1
July	1,009.9	6.7	14.5	46	SE	SE	5.85	5.3
August	1,009.9	5.8	15.4	47	SE	SSE	6.43	5.5
September	1,009.9	5.3	14.5	46	SE	SSE	6.67	5.5
October	1,009.1	5.3	15.0	46	SSE	SSE	7.52	5.3
November	1,008.0	2.8	12.2	38	SE	SSE	7.53	5.5
December	1,007.0	2.3	9.6	54	NNW	SW	7.00	6.1
Year Totals	..	..	..	..	..	..	73.59	..
Year Averages	1,008.5	4.1	11.5	..	SE	SSE	..	5.8
Year Extremes	..	..	..	55	..	..	..	..

(*a*) Scale 0–8.

TEMPERATURE AND SUNSHINE

Month	*Mean temperature (°Fahr.)*			*Extreme shade temperature (°Fahr.)*		*Extreme temperature (°Fahr.)*	*Mean daily hours of sunshine*
	Mean max.	*Mean min.*	*Mean*	*Highest*	*Lowest*	*Lowest on grass*	
No. of years of observations	22	22	22	22	22	11	11
January	89.9	73.3	81.6	97.2 11/64	68.8 27/49	65.3 21/66	6.5
February	89.0	73.2	81.1	97.0 12/47	65.8 17/57	65.4 17/57	6.2
March	89.0	72.9	80.9	95.8 26/46	65.0 23/61	58.0 31/66	6.2
April	88.0	72.7	80.4	93.6 5/46	62.3 11/46	56.6 1/66	6.9
May	87.9	72.6	80.3	92.9 2/64	58.1 28/53	59.0 18/66	7.5
June	86.5	71.4	78.9	93.0 25/58	58.0 23/54	54.0 29/65	6.9
July	86.0	70.7	78.3	92.0 11/64	57.3 8/46	50.8 30/65	6.7
August	86.4	71.3	78.9	92.8 12/58	58.6 14/61	54.0 14/61	6.8
September	87.4	72.2	79.8	94.6 17/65	58.0 10/61	53.0 10/61	6.9
October	89.5	72.9	81.2	95.9 4/65	61.3 11/55	52.2 5/65	7.5
November	90.4	72.8	81.6	97.3 11/65	63.2 7/63	55.0 4/63	8.4
December	90.3	73.4	81.9	96.0 (*a*)	67.2 1/63	63.0 6/66	7.2
Year Averages	88.4	72.5	80.4	.. ..	.. ..	.. ..	7.0
Year Extremes	..	..	..	97.3 11/11/65	57.3 8/7/46	50.8 30/7/65	..

(*a*) 4/1945 and 26/1959.

HUMIDITY, RAINFALL AND FOG

Month	*Vapour pressure mean 9 a.m. (m.bars)*	*Mean relative humidity % at 9 a.m.*	*Rainfall (inches)*					*Fog mean no. days*
			Mean mthly	*Mean No. of days of rain*	*Greatest monthly*	*Least monthly*	*Greatest in one day*	
No. of years of observations	21	21	22	22	22	22	22	21
January	28.0	77	5.96	16	12.69 1963	1.02 1950	2.70 12/46	3.4
February	28.5	81	8.17	18	17.08 1957	2.37 1947	5.54 14/49	3.9
March	28.3	80	7.17	18	17.42 1951	1.11 1950	4.42 16/51	7.3
April	28.8	82	7.12	15	28.65 1946	0.36 1966	12.89 12/46	7.7
May	28.2	79	2.10	8	7.35 1952	0.08 1958	3.02 18/60	7.0
June	26.5	78	1.72	7	12.33 1963	0.00 1957	8.06 5/63	3.7
July	25.2	77	0.75	6	2.75 1949	0.01 1958	1.33 1/52	2.5
August	24.9	74	1.20	7	5.43 1953	0.02 1959	1.94 22/53	2.1
September	25.5	73	1.53	7	13.53 1958	0.00 (*a*)	5.90 5/58	2.1
October	26.3	69	1.50	7	7.12 1948	0.06 1951	2.13 31/64	2.5
November	26.6	68	2.91	8	9.22 1952	0.00 1965	3.56 29/54	2.6
December	27.7	73	6.26	14	10.57 1954	1.02 1948	4.83 29/65	3.0
Year Totals	..	..	46.39	131	.. ..	.. ..	.. ..	47.8
Year Averages	27.0	76	..	..	.. ..	.. ..	.. ..	..
Year Extremes	..	..	..	..	28.65 4/1946	0.00 (*b*)	12.89 12/4/46	..

(*a*) 1948 and 1950. (*b*) June 1957, September 1948 and 1950, and November 1965.

CLIMATOLOGICAL DATA: LAE (NEW GUINEA)

(Meteorological Office: Lat. 6° 44′ S., Long. 147° 00′ E., Height above M.S.L. 25 ft)

BAROMETER, WIND AND CLOUD

Month	*Bar. corrected to 32° F. mn sea level and standard gravity from 9 a.m. and 3 p.m. readings (m.bars)*	*Wind*					*Mean amount of clouds, 9 a.m., 3 p.m., 9 p.m.(a)*
		Average miles per hour		*Highest gust speed (mph)*	*Prevailing direction*		
		9 a.m.	*3 p.m.*		*9 a.m.*	*3 p.m.*	
No. of years of observations	21	5	5	11	5	5	18
January	1,006.9	7.7	8.3	51	NW	SE	6.8
February	1,006.7	8.1	7.6	43	NW	SE	6.8
March	1,007.2	6.8	7.3	40	NW	SE	7.0
April	1,008.3	4.6	7.2	40	NW	SE	6.5
May	1,009.5	2.8	6.5	36	NW	SE	6.1
June	1,010.5	2.7	6.2	41	NW	SE	6.1
July	1,011.0	2.0	6.6	36	NW	SE	6.5
August	1,011.0	2.2	6.8	40	N	SE	6.5
September . . .	1,010.9	2.3	7.9	38	NW	SE	6.3
October	1,010.0	2.9	7.9	40	NW	SE	6.0
November . . .	1,008.4	4.6	8.7	45	NW	SE	6.3
December . . .	1,007.3	6.0	8.4	41	NW	SE	6.7
Year Totals . . .	..	..	..	..	..	..	..
Year Averages . .	1,009.0	4.4	7.5	..	NW	SE	6.5
Year Extremes . .	..	..	..	51	..	..	..

(*a*) Scale 0–8.

TEMPERATURE

Month	*Mean temperature (°Fahr.)*			*Extreme shade temperature (°Fahr.)*	
	Mean max.	*Mean min.*	*Mean*	*Highest*	*Lowest*
No. of years of observations . .	18	18	18	18	18
January	88.0	74.7	81.3	100.8 20/59	69.2 7/60
February	88.2	74.7	81.5	99.1 14/57	70.0 24/62
March	87.4	74.6	81.0	101.7 6/56	71.1 16/56
April	86.1	73.9	80.0	93.0 4/56	70.4 22/66
May	85.1	73.2	79.1	91.8 24/52	67.0 30/53
June	83.4	72.2	77.8	92.2 8/58	67.0 20/53
July	81.9	71.5	76.7	89.9 16/64	66.7 31/65
August	82.1	71.6	76.9	90.4 28/64	67.0 27/55
September	83.6	71.9	77.7	90.0 12, 13/50	66.3 13/61
October	85.4	72.6	79.0	95.3 31/49	66.4 4/65
November	86.7	73.4	80.1	94.0 30/61	69.6 13/65
December	87.2	74.2	80.7	96.1 24/59	68.5 19/64
Year Averages	85.4	73.2	79.3	.. ..	.. ..
Year Extremes	..	..	..	101.7 6/3/56	66.3 13/9/61

HUMIDITY, RAINFALL AND FOG

Month	*Vapour pressure mean 9 a.m. (m.bars)*	*Rainfall (inches)*					*Fog mean no. days*
		Mean monthly	*Mean No. of days of rain*	*Greatest monthly*	*Least monthly*	*Greatest in one day*	
No. of years of observations	21	22	22	22	22	22	21
January	28.8	11.23	20	20.54 1964	4.21 1958	7.84 9/59	0.1
February	28.4	9.09	19	15.06 1953	2.09 1957	5.26 8/53	0.1
March	28.7	13.00	21	20.63 1952	6.19 1961	6.38 10/52	0.1
April	29.2	15.73	22	23.71 1955	11.28 1956	7.84 15/53	0.0
May	28.9	15.27	22	33.08 1957	2.65 1956	6.52 17/61	0.1
June	27.9	15.96	22	30.32 1965	4.51 1964	8.90 4/51	0.0
July	27.2	20.12	24	41.66 1953	5.63 1956	11.76 16/53	0.1
August	27.3	20.49	25	33.99 1957	6.32 1951	10.18 14/47	0.0
September	27.5	17.85	23	29.12 1950	7.58 1960	6.16 10/51	0.0
October	27.9	13.76	21	26.20 1957	4.82 1956	5.77 20/63	0.1
November	28.5	12.90	21	22.73 1948	5.04 1956	7.26 2/45	0.0
December	28.9	12.90	21	23.81 1957	6.06 1951	7.58 6/58	0.0
Year Totals . . .	..	178.30	261	.. ..	.. ..	.. ..	0.6
Year Averages . .	28.3	..	..	.. ..	.. ..	.. ..	..
Year Extremes . .	..	..	..	41.66 7/1953	2.09 2/1957	11.76 16/7/53	..

Population

Censuses of the non-indigenous population of the Territory of Papua and New Guinea have been taken in conjunction with censuses of the Commonwealth of Australia. For the indigenous population of the Territory of Papua and New Guinea, estimates of size, geographic location, and the broad age distribution of the population were available from the results of the Department of District Administration census (formerly known as the Tax Census). This was conducted over most of the Territory, but was continuous rather than conducted at a common date for all areas covered. No regular pattern of operations was adopted, although once the census had been taken in an area it was in general repeated fairly frequently. Although these estimates were of great value, the limitations of the information on population characteristics and the lack of simultaneous collection for all areas made them insufficient for many purposes. The 1966 census covered both indigenous and non-indigenous populations, and thus superseded the traditional census of non-indigenes.

Figures for the non-indigenous population as enumerated at censuses held in conjunction with Commonwealth censuses and estimates of the indigenous population based on the Department of District Administration censuses are set out below.

TERRITORY OF PAPUA AND NEW GUINEA: POPULATION AT CENSUSES, 1921 TO 1966

	Indigenous							
	Enumerated					*Non-indigenous*		
Year	*Males*	*Females*	*Persons*	*Persons estimated*	*Total persons*	*Males*	*Females*	*Persons*
				PAPUA				
1921 . .	59,825	52,687	112,512	..	..	1,408	670	2,078
1933 . .	..	..	170,836	..	..	1,232	941	2,173
1941 . .	..	..	..	..	..	..	..	..
1947 . .	..	..	..	..	..	2,057	1,182	3,239
1950 . .	117,455	104,474	221,929	146,630	368,559	..	..	..
1954 . .	151,464	134,732	286,196	202,200	488,396	3,867	2,446	6,313
1961 . .	236,676	209,632	446,308	67,340	513,648	5,490	4,304	9,794
1966 . .	310,153	281,806	591,959	..	591,959	8,307	6,070	14,377
				NEW GUINEA				
1921 . .	(*a*)100,445	(*a*) 66,276	(*a*)166,721	..	..	2,502	671	3,173
1933 . .	218,218	182,911	401,129	..	..	3,709	1,507	5,216
1941 . .	324,830	318,988	(*b*)684,284	300,000	984,284	..	..	..
1947 . .	..	..	..	..	..	4,369	1,831	6,200
1950 . .	415,939	354,116	770,055	301,050	1,071,105	..	..	..
1954 . .	538,113	472,480	1,010,593	184,714	1,195,307	7,201	4,241	11,442
1961 . .	721,806	647,277	1,369,083	64,300	1,433,383	9,158	6,378	15,536
1966 . .	810,153	748,205	1,558,358	..	1,558,358	11,746	8,546	20,292

(*a*) 1920; figures for 1921 not available. (*b*) Includes 34,087 indentured labourers, 1,127 native constabulary, 4,823 attending approved mission schools, and 429 patients at Anelaua Leprosarium and Taskul Observation Colony (New Ireland), for which particulars of sex are not available.

The total indigenous population of Papua and New Guinea at the 1966 census was 2,150,317 persons, and the total non-indigenous, 34,669 persons. Estimated totals for 30 June 1968 are 2,276,632 and 40,363 persons respectively. *See* pages 1179 and 1185 for further details.

Population Census, 1966

The census was conducted over the period June–July 1966 and covered both indigenous and non-indigenous populations. For census purposes the indigenous population comprised the aboriginal peoples of the Territory of Papua and New Guinea, Australia, New Zealand, and the other islands of Polynesia, Melanesia, and Micronesia, and all persons descended from these aboriginal peoples to the extent of more than one half. The non-indigenous population comprised all persons not covered by the definition of the indigenous population given above. The Census completely enumerated virtually all the non-indigenous population, together with all the indigenous population located in areas outside rural villages. The rural village population was estimated by means of a representative sample of approximtely 10 per cent of rural villages. Consequently the figures published for the population of rural villages are estimates of total figures based on a representative sample, while those published for other areas are totals based on complete enumeration. Totals for a District or Territory as a whole are the sums of these estimated and actual figures.

A short description of the development operations undertaken before the 1966 census and of the actual census operations is given in Year Book No. 53, pages 141–2. A description of Methods and definitions used can be found in *Population Census, 1966—Preliminary Bulletin No. 20: Summary of Population* issued by the Bureau of Statistics, Konedobu, Papua.

Selected characteristics

The following tables and text present statistics relating to some selected characteristics as derived from the 1966 census. Details of all characteristics published can be found in Bulletin No. 20 (*see* preceding paragraph). In the tables, minor discrepancies between totals and sums of components are due to the rounding of estimates calculated from sample data.

POPULATION, BY ADMINISTRATIVE DISTRICTS(*a*)
TERRITORY OF PAPUA AND NEW GUINEA, CENSUS, JUNE-JULY 1966
(Persons)

District(a)	*Indigenous*	*Non-indigenous*	*Total*	*Approximate area square miles*	*Persons per square mile*
Western	61,424	436	61,860	40,000	1.55
Gulf	55,077	233	55,310	15,000	3.69
Central	134,693	11,638	146,331	12,000	12.19
Milne Bay	99,161	996	100,157	7,800	12.84
Northern	57,967	608	58,575	9,000	6.51
Southern Highlands	183,635	466	184,101	6,200	22.69
Total, Papua	*591,959*	*14,377*	*606,336*	*90,000*	*6.74*
Eastern Highlands	201,978	2,054	204,032	5,000	40.81
Chimbu	166,923	322	167,245	2,800	59.73
Western Highlands	289,452	1,690	291,142	9,200	31.64
West Sepik	99,141	466	99,608	19,700	5.06
East Sepik	156,406	1,525	157,931	10,500	15.04
Madang	149,986	2,061	152,047	10,800	14.08
Morobe	204,370	4,696	209,066	12,700	16.46
West New Britain	43,886	306	44,192	7,100	6.22
East New Britain	104,887	5,043	109,930	7,000	15.70
New Ireland	49,334	964	50,298	3,800	13.24
Bougainville	71,761	718	72,479	4,100	17.68
Manus	20,232	447	20,679	800	25.85
Total, New Guinea	*1,558,358*	*20,292*	*1,578,650*	*93,500*	*16.88*
Total, Papua and New Guinea	**2,150,317**	**34,669**	**2,184,986**	**183,500**	**11.91**

(*a*) For location of districts *see* map on plate 55.

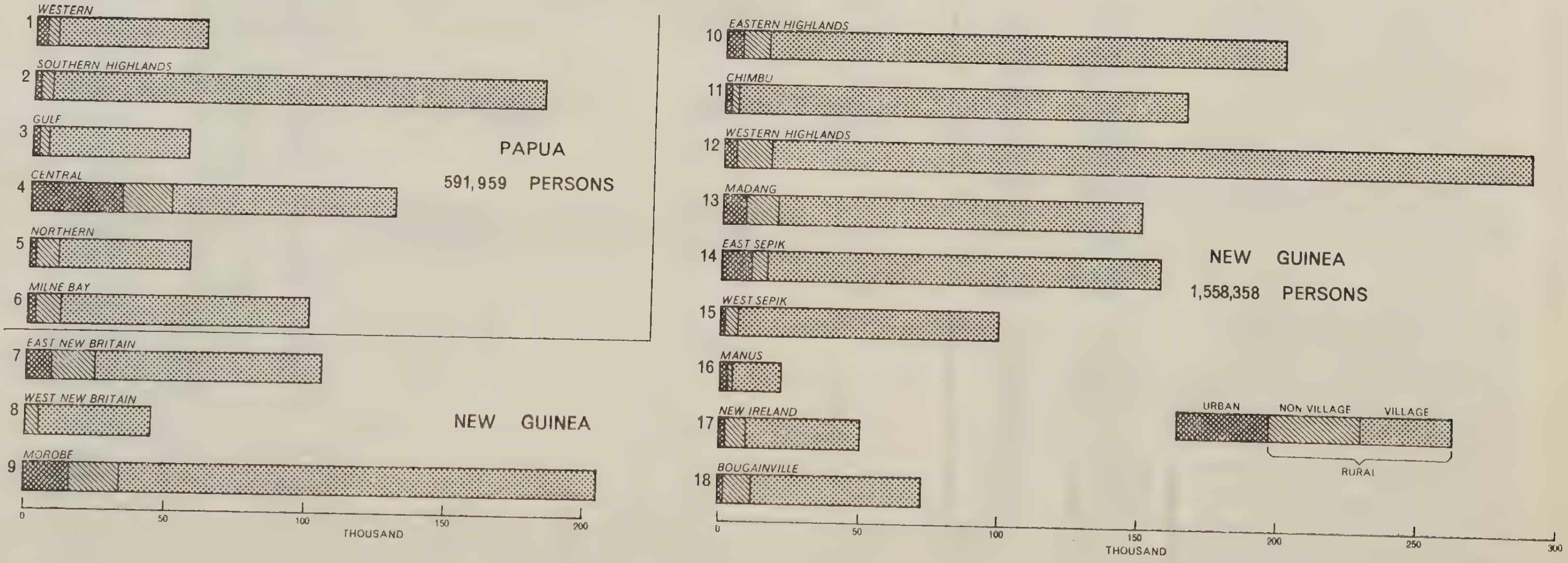
The chart on plate 55 shows the indigenous populations of districts classified by the categories urban, rural (village and non-village).

The population (indigenous and non-indigenous) of the major towns at the census, June-July 1966, was as follows: Port Moresby, 41,848; Lae, 16,546; Rabaul, 10,561; Wewak, 8,945; Madang, 8,837; Goroka, 4,826; Daru, 3,663; Mount Hagen, 3,315; Bulolo, 2,724; Lorengau, 2,446; Samarai, 2,201; Kavieng, 2,142.

INDIGENOUS POPULATION OF PAPUA AND NEW GUINEA

CENSUS JUNE-JULY 1966

INDIGENOUS POPULATION : *(i) Aboriginal peoples of Papua and New Guinea, Australia, New Zealand and other islands of Polynesia, Melanesia and Micronesia, and (ii) all persons descended from such peoples to the extent of more than one half.*



URBAN AREAS : *Centres with populations of 500 or more, excluding separately located schools, hospitals, missions, etc*

RURAL AREAS : *(i) Non-village areas — Administration and local government centres with populations of less than 500 (but including isolated Administration schools of all sizes); missions (including mission schools, hospitals, plantations, etc.), plantations, etc*

(ii) Rural villages — villages recorded as such by Department of District Administration except those in urban areas

MAP SHOWING CENSUS DISTRICTS

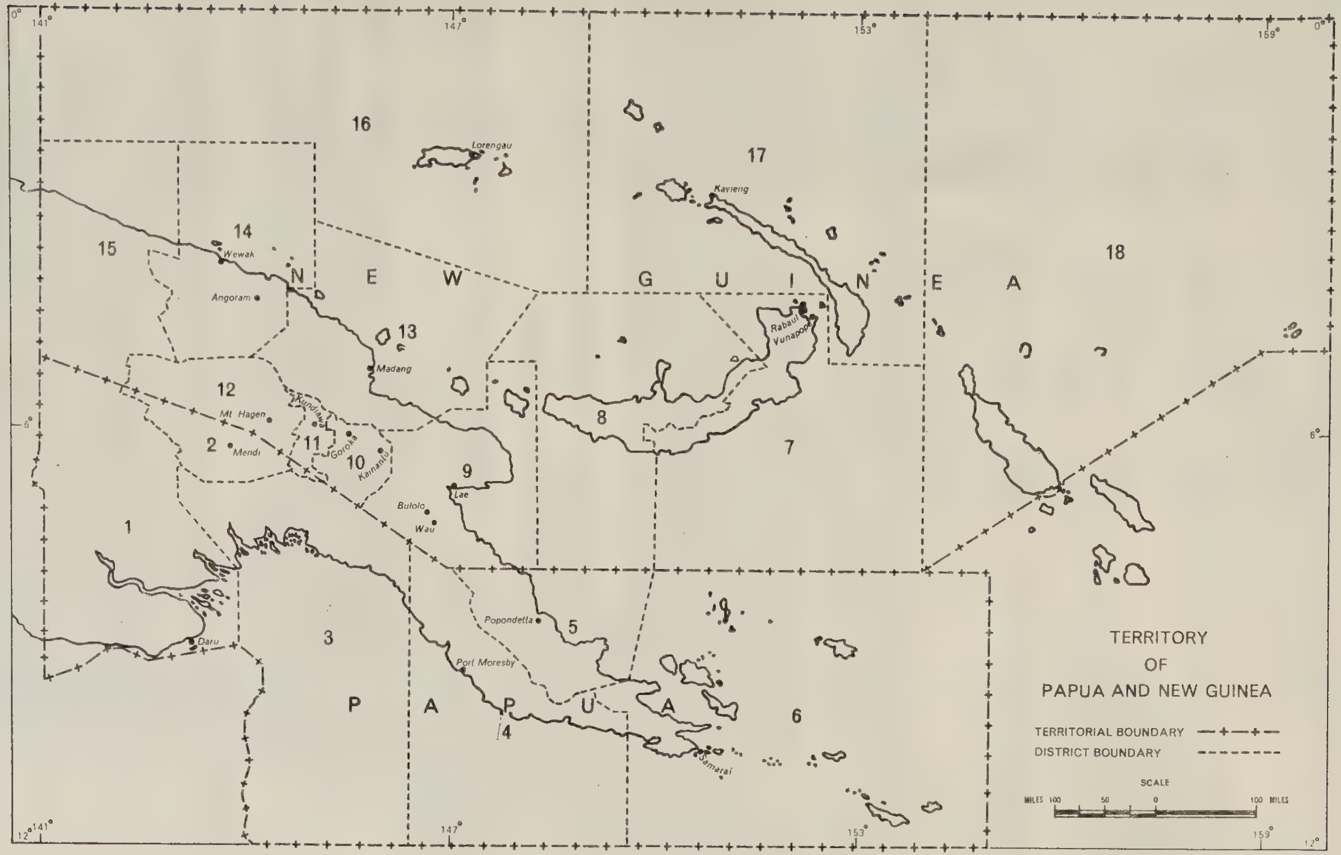

0°
141°
147°
153°
159°
0°
16
Lorengau
17
Kavieng
18
15
14
Wewak
N E W G U I N E A
Angoram
13
Madang
12
Mt Hagen
Kundiawa
2
Mendi
11
Goroka
10
Kainantu
9
Lae
8
7
Rabaul
Vunapope
Bulolo
Wau
1
6°
6°
Daru
3
Popondetta
5
Port Moresby
P A P U A
4
6
Samarai
TERRITORY
OF
PAPUA AND NEW GUINEA
TERRITORIAL BOUNDARY
DISTRICT BOUNDARY
SCALE
MILES 100
50
0
100 MILES
12°
141°
147°
153°
159°
12°

PLATE 55

POPULATION, BY SCHOOL EDUCATION
TERRITORY OF PAPUA AND NEW GUINEA, CENSUS, JUNE-JULY 1966
(Persons)

School education	*Indigenous*			*Non-indigenous*		
	Papua	*New Guinea*	*Total*	*Papua*	*New Guinea*	*Total*
Secondary education	6,274	8,273	14,546	9,047	12,183	21,230
Primary education—						
Primary 'A' schools(*a*) . .	405	459	864	2,460	4,083	6,543
Primary 'T' schools(*b*) . . .	98,473	186,172	284,641	484	279	763
Primary school (English not taught)	89,447	216,740	306,191	23	149	172
Total primary education . .	*188,325*	*403,371*	*591,698*	*2,967*	*4,511*	*7,478*
Attended school, grade not known .	2,193	6,222	8,416	225	467	692
Never attended school . . .	395,090	1,140,319	1,535,409	1,981	3,082	5,063
Not stated	77	172	249	157	49	206
Total	**591,959**	**1,558,358**	**2,150,317**	**14,377**	**20,292**	**34,669**

(*a*) Schools where lessons are taught in English and the primary school syllabus of New South Wales is followed.
(*b*) Schools where lessons are taught in simplified English and a specially designed syllabus is followed.

NOTE. The above table includes persons of all ages. The category 'never attended school' therefore includes a large number of persons too young to attend school.

At the census the *literacy* of persons aged ten years and over was determined on the basis of whether a person could read and write very simple sentences in any of the following languages, or a combination of them, English, Pidgin, Police Motu, any indigenous or foreign language. The indigenous population ten years and over totalled 1,458,054. The numbers of persons who were literate in one or more of the three main languages of administration were as follows: English 166,386, Pidgin 178,271, Police Motu 49,310. Persons who were literate in more than one language are included in each category which applies, for example 28,240 persons were literate in both English and Pidgin and are therefore included in both totals. Of the total population aged ten years and over, 1,126,995 (72 per cent) were illiterate.

The *work force* of Papua and New Guinea was divided into three main categories as follows:
(i) Wholly or mainly money-raising.
(ii) Mainly subsistence but with some money-raising.
(iii) Wholly subsistence.

The questions on the interview questionnaire concerned with subsistence occupation and employment status were as follows.

'Subsistence occupation—
(*a*) What is the person's subsistence occupation?
Write one of the following: Food gardener, 'G'. Fisherman, 'F'. Other subsistence, give details. Sago processor, 'P'. Hunter, 'H'. No subsistence, 'N'.
(*b*) Does the person spend more time at subsistence work (write 'S') or working at a money-raising occupation (write 'M')? If no occupation of any kind write 'NA'.
(*c*) Does the person do this subsistence work on his own account (write 'O') or as a family helper (write 'H')? If no subsistence occupation write 'NA'.

'Employment status—
(*a*) Did the person have a paid job or money-raising occupation of any kind excluding subsistence work, last week (even though he may have been absent from it)? Answer YES or NO.
(*b*) Did the person do any money-raising work at all last week? Answer YES or NO. Persons working in a family business or plantation should answer YES.
(*c*) Was the person temporarily laid off by his employer without pay for the *whole* of last week? Answer YES or NO.
(*d*) Was the person actively looking for a paid job last week? Answer YES or NO.
'Actively looking for work' means (i) being registered with an employment agency or Labour Office, or (ii) approaching or trying to find possible employers.
(*e*) Was he looking for his first paid job? Answer YES or NO.'

It should be noted that by definition persons who were less than ten years of age were excluded from the work force.

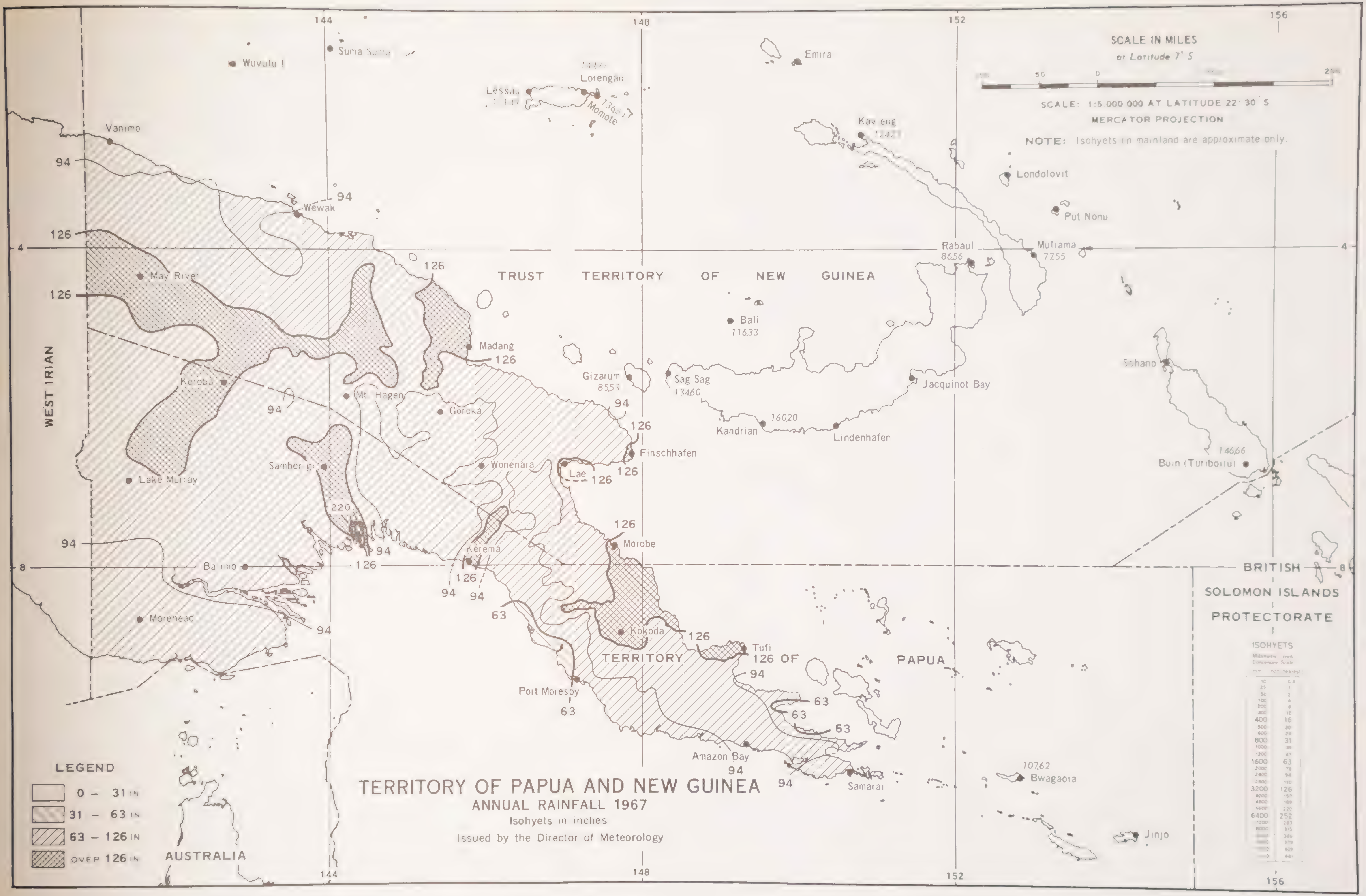

TERRITORY OF PAPUA AND NEW GUINEA
ANNUAL RAINFALL 1967
Isohyets in inches
Issued by the Director of Meteorology
LEGEND
0 – 31 IN
31 – 63 IN
63 – 126 IN
OVER 126 IN
SCALE IN MILES
at Latitude 7° S
50
0
250
SCALE: 1:5 000 000 AT LATITUDE 22° 30′ S
MERCATOR PROJECTION
NOTE: Isohyets on mainland are approximate only.
144
148
152
156
4
8
TRUST TERRITORY OF NEW GUINEA
TERRITORY OF PAPUA
WEST IRIAN
AUSTRALIA
BRITISH SOLOMON ISLANDS PROTECTORATE
Wuvulu I
Suma Suma
Lessau
Lorengau
Momote
Emira
Kavieng
124.21
Londolovit
Put Nonu
Vanimo
Wewak
Rabaul
86.56
Muliama
77.55
May River
Bali
116.33
Madang
Gizarum
85.53
Sag Sag
134.60
Jacquinot Bay
Sohano
Koroba
Mt. Hagen
Goroka
Kandrian
160.20
Lindenhafen
Finschhafen
Samberigi
Wonenara
Lae
Lake Murray
146.66
Buin (Turiboiru)
Kerema
Morobe
Balimo
Morehead
Kokoda
Tufi
Port Moresby
Amazon Bay
Samarai
107.62
Bwagaoia
Jinjo
94
126
220
63
ISOHYETS
Millimetres – Inches Conversion Scale
400
16
800
31
1600
63
3200
126
6400
252

PLATE 56

Persons who indicated 'YES' to any one of the employment status questions (*a*) to (*e*) were classified as in the money-raising work force. This approach conforms closely to the recommendations of the Eighth International Conference of Labour Statisticians held in Geneva in 1954.

It should be noted that during the field interviewing the money-raising ability of persons was taken into account in the decision to include them in either the money-raising or wholly subsistence work force. For example where it could be ascertained that a person with a subsistence occupation had the capacity and inclination to make money, i.e. he had in the past and expected in the near future to make money from the crop of his coffee garden, vegetable garden, etc., (although he may not have made any money during the reference week) he was included in the money-raising work force. As a result the total for the money-raising work force (particularly the mainly subsistence with some money-raising category) tends to be somewhat higher than would be obtained from a pure 'last week' approach.

These persons were then classified to one of the above-mentioned work force categories by reference to subsistence occupation question (*b*). If a person spent more time at subsistence work ('s') he was classified as in the 'mainly subsistence but with some money-raising' work force category. On the other hand if he spent more time working at a money-raising occupation ('M') or ('NA') to subsistence occupation question (*b*) he was classified as in the 'wholly money-raising or mainly money-raising with some subsistence' work force category.

Persons not in the money-raising work force who indicated in subsistence occupation questions (*a*) to (*c*) that they were actively engaged in subsistence work, e.g. (*a*) ('G')—Food Gardener (*b*) ('s')—more time at subsistence work and (*c*) ('H')—Family Helper, were classified to the 'wholly subsistence' work force category. *All other persons were classified as not in the work force.*

OPULATION IN THE WORK FORCE, BY OCCUPATIONAL STATUS: TERRITORY OF PAPUA AND NEW GUINEA, CENSUS, JUNE-JULY 1966

	Papua			*New Guinea*			*Total*		
cupational status	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
				INDIGENOUS					
holly or mainly money-raising—									
Employed—									
Employer	483	22	505	2,425	326	2,751	2,908	348	3,256
Self-employed	6,249	1,019	7,268	40,469	8,494	48,963	46,718	9,513	56,231
Employee	39,328	2,877	42,205	89,950	8,062	98,012	129,278	10,939	140,217
Helper, unpaid	1,870	3,082	4,952	8,246	18,776	27,022	10,116	21,858	31,974
Total employed	*47,930*	*7,000*	*54,930*	*141,090*	*35,658*	*176,748*	*189,020*	*42,658*	*231,678*
Unemployed (including seeking first job)	407	71	478	1,347	139	1,486	1,754	210	1,964
Total wholly or mainly money-raising	*48,337*	*7,071*	*55,408*	*142,437*	*35,797*	*178,234*	*190,774*	*42,868*	*233,642*
ainly subsistence with some money-raising	36,488	37,839	74,327	170,233	197,549	367,782	206,721	235,388	442,109
Total indigenous money-raising work force	*84,825*	*44,910*	*129,735*	*312,670*	*233,346*	*546,016*	*397,495*	*278,256*	*675,751*
holly subsistence	91,434	113,312	204,746	159,743	216,256	375,999	251,177	329,568	580.745
Total indigenous work force	176,259	158,222	334,481	472,413	449,602	922,015	648,672	607,824	1,256,496
				NON-INDIGENOUS					
holly or mainly money-raising—									
Employed—									
Employer	331	89	420	699	164	863	1,030	253	1,283
Self-employed	93	44	137	160	94	254	253	138	391
Employee	5,463	2,283	7,746	7,466	2,762	10,228	12,929	5,045	17,974
Helper, unpaid	102	116	218	152	257	409	254	373	627
Total employed	*5,989*	*2,532*	*8,521*	*8,477*	*3,277*	*11,754*	*14,466*	*5,809*	*20,275*
Unemployed (including seeking first job)	15	16	31	29	25	54	44	41	85
Total wholly or mainly money-raising work force	*6,004*	*2,548*	*8,552*	*8,506*	*3,302*	*11,808*	*14,510*	*5,850*	*20,360*
ainly subsistence with some money-raising	8	3	11	18	16	34	26	19	45
Total non-indigenous money-raising work force	*6,012*	*2,551*	*8,563*	*8,524*	*3,318*	*11,842*	*14,536*	*5,869*	*20,405*
holly subsistence	10	18	28	11	13	24	21	31	52
Total non-indigenous work force	6,022	2,569	8,591	8,535	3,331	11,866	14,557	5,900	20,457

Administration

The *Papua-New Guinea Provisional Administration Act* 1945–1946, which provided for the transfer back of control from the military authorities to civil authorities after the 1939–45 War, was repealed by the *Papua and New Guinea Act* 1949, which came into force on 1 July 1949. The latter Act approved the placing of the Territory of New Guinea under the International Trusteeship system and provided for an Administrative Union of the Territory of Papua and the Territory of New Guinea with one Administrator, a Legislative Council and an Executive Council, one Supreme Court, and one Public Service.

For an outline of the development of the Legislative and Executive (later Administrator's) Councils between 1949 and 1963, *see* Year Book No. 51, page 117.

In May 1963 the Commonwealth Government passed an amendment to the Papua and New Guinea Act, making provision for a House of Assembly of sixty-four members to replace the Legislative Council. The house then consisted of ten official members appointed by the Governor-General on the advice of the Administrator, forty-four members elected by the people of the Territory on a common roll in forty-four open electorates, and ten non-indigenous persons elected on a common roll in ten special electorates comprising one or more open electorates. The first elections for the House of Assembly were held in February-March 1964, and the inaugural meeting of the new House was convened on 8 June 1964.

The 1963 Act also increased the membership of the Administrator's Council from seven to eleven, seven of whom must be elected members of the House of Assembly.

In October 1966 the Commonwealth Parliament passed a further amendment to the Papua and New Guinea Act, providing for an increase in the membership of the House of Assembly to ninety-four, sixty-nine members representing open electorates, fifteen from regional electorates and ten official members.

The second general election for the House of Assembly was held from 17 February–16 March 1968, and the Second House was convened on 4 June 1968. The Ministerial Nomination Committee in conjunction with the Administrator chose fifteen elected members who were appointed to seven Ministerial Member and eight Assistant Ministerial Member positions.

The *Papua and New Guinea Act* 1968 provides for the Administrator's Council to become the Administrator's Executive Council, deciding major matters of Territory policy. In June 1968 it had its first meetings. It consists of the Administrator, the seven Ministerial Members, three official Members, and a twelfth Councillor who is an elected M.H.A. but a non-office holder.

Local government was introduced in 1949 by the Native Village Councils Ordinance which was replaced by the *Local Government Ordinance* 1963. The Administrator may establish by proclamation local government councils with authority in defined areas. Provision is also made for the establishment of multi-racial local councils.

Judiciary

The courts which exercise jurisdiction within the Territory are: the Supreme Court of the Territory of Papua and New Guinea, District Courts (Papua and New Guinea), Local Courts and Children's Courts (Papua and New Guinea), and Warden's Courts.

The Supreme Court is the highest judicial authority in the Territory and has unlimited criminal and civil jurisdiction. District Courts have criminal jurisdiction over the less serious offences which are punishable on summary conviction, but have no jurisdiction to try treason crimes, misdemeanours and other indictable offences. They also exercise a limited civil jurisdiction. The Local Courts exercise a substantially similar jurisdiction but at a more subordinate level. The Administrator has power to establish, in respect of each gold-field or mineral field, warden's courts with jurisdiction over civil cases respecting mining or mining lands held under the *Mining Ordinance* 1937–1966 of Papua and *Mining Ordinance* 1928–1966 of New Guinea and offences against the mining laws of the Territory.

In addition, there is the Land Titles Commission set up under the *Land Titles Commission Ordinance* 1962–1967 to inquire into and determine rights in land, particularly native land. The Commission has the particular function under the *New Guinea Land Titles Restoration Ordinance* 1951–1966 to inquire into and determine claims to interest in land where the official records have been lost or destroyed as a result of the Japanese invasion of New Guinea. For the purposes of the latter Ordinance the jurisdiction of the Commission is exercised by the Chief Commissioner or a Commissioner appointed under the *Land Titles Commission Ordinance* who is a qualified legal practitioner.

Agriculture and animal industry

Soils

Although many parts of Papua and New Guinea are covered by skeletal soils unsuitable for agriculture, there are extensive areas in all districts where fertile soils occur suitable for growing a variety of crops. Much of the agriculture of the Territory up to the present has been on soils on the coastal plains, which, apart from the swamp soils, consist mainly of alluvium and podsolised alluvium. So far these have been mostly under coconut plantations, although other crops such as rubber, coffee and cocoa are also grown. The coastal swamp soils, of which there are extensive areas in the delta plains of the Sepik and Fly rivers and intermittently around the coasts and along the lower reaches of other rivers, are in general quite unsuited to any form of agricultural development.

Volcanic soils probably offer the greatest prospects for development. They are found mostly on the central plateau and southern foothills of the main island, but there are also areas in New Britain (particularly in the Gazelle and Willaumez Peninsulas), Bougainville and New Ireland, as well as in numbers of smaller islands. Other rich soils are the alluvials of the river valleys. The largest single area of this type is in the valley occupied by the Ramu and Markham Rivers.

Land tenure

The *Land Ordinance* 1962 of the Territory of Papua and New Guinea, which came into operation in 1963, replaced much land legislation previously in force separately in the two Territories. This simplification in legislation was a major step towards applying uniform principles to land tenure throughout the whole of the Territory of Papua and New Guinea. All land in the Territory other than native land or land subject to any estates, rights, titles, or interests in force from time to time is Administration land.

There is considerable variation throughout the Territory in the nature of customary ownership of land. In most areas some rights remain in the landholding group, and individuals within the group have limited rights of use, either for life or for a shorter period. Thus the normal system by which the rights of ownership in land use are acquired is by birth to a landholding group. Transfer of rights between individuals by sale and purchase appears to have been unusual in the past, but this practice is now an established custom in some localities and appears to be increasing. Inheritance may be based on either patrilineal or matrilineal descent, or both. In parts of the Territory, however, there is a tendency for the whole inheritance system to change, particularly in communities where it is based on matrilineal descent. Following a close study of the problems in relation to land holdings by indigenes, the Government has laid down the following broad principles of policy.

The ultimate and long-term objective in Papua and New Guinea is to introduce throughout the Territory a single system of land holding regulated by the central Administration by statute, administered by the Department of Lands of the central Administration and providing for secure individual registered titles after the pattern of the Australian system.

Only the Administration working through the Department of Lands, Surveys and Mines and through the Registrar of Titles may issue and register land titles.

Land subject to native custom remains subject only to native custom until it is taken out of custom either by acquisition by the Administration or by a process, provided for by the *Land (Tenure Conversion) Ordinance* 1963–1967, of conversion of title to an individual registered title. Upon either acquisition or conversion of title, compensation is provided in respect of extinction of rights under native custom.

Land held under native custom may not be acquired outside of native custom by other than the Administration. Land may not be acquired by the Administration except for prescribed public purposes unless the native owners are willing to sell and the Administration is convinced, through its Department of District Administration, that the land is not required by them, and conversion of title from native custom to individual registered title may take place only if all those interested in the land under native custom consent to conversion and the method of conversion.

The services of Commissioners under the *Land Titles Commission Ordinance* 1962–1967 are used, as a first priority, on investigations into claims by the Administration that land is ownerless and may therefore be declared administration land, on investigation into the ownership under native custom of land proposed to be acquired by the Administration, on settlement of disputes about the ownership of land held under native custom, and on investigations into the rights held under native custom in land proposed to be converted to individual registered title. The Commissioners, as opportunity offers, continue investigations into the holding of land under native custom; the results of such investigations are recorded for use in connection with future acquisitions or conversions of title.

The legislation and administrative steps necessary to put the remainder of this policy into effect are well advanced.

Suitable crops

Most tropical crops can be grown in Papua and New Guinea. Those of commercial importance at present are coconuts, cocoa, rubber, coffee, tea, peanuts, pyrethrum and passion fruit. Major developments in the production of oil-palm are under way. This crop is expected to be of future economic significance.

Non-indigenous rural production

In 1967–68 there were 1,240 holdings in use by non-indigenous persons, 341 being in Papua and 899 in New Guinea. The total area of these holdings was 1,026,882 acres, 273,835 in Papua and 753,047 in New Guinea. The following tables summarise the information available for principal activities.

TERRITORY OF PAPUA AND NEW GUINEA
NUMBER OF HOLDINGS, AREA, PRODUCTION AND NEW PLANTINGS
1964 TO 1968

(*Source: Production Bulletin*, Part I: *Rural Industries*, Bureau of Statistics, Papua)

Year ended 31 March—	*Holdings*	*Area under crop(a)*	*Trees(a)*	*Production*	*New plantings*	
					Area	*Trees(b)*
		acres	'000	tons	acres	'000
Coconuts—						
1964 . . .	687	267,578	12,076	83,667	2,771	242
1965 . . .	670	262,039	11,995	85,034	4,013	272
1966 . . .	667	264,391	12,006	90,209	5,512	377
1967 . . .	683	269,127	12,704	81,159	5,208	460
1968(*c*) . . .	681	270,176	12,809	86,736	4,902	586
Cacao—						
1964 . . .	429	112,404	18,360	11,285	6,349	1,809
1965 . . .	435	116,981	19,792	14,326	7,058	1,835
1966 . . .	439	122,226	20,696	14,427	8,354	1,870
1967 . . .	447	126,147	21,830	15,059	4,981	1,366
1968(*c*) . . .	447	129,706	21,400	18,092	5,446	1,749
Coffee—						
1964 . . .	247	10,851	6,865	3,032	890	800
1965 . . .	261	12,228	7,860	3,374	1,345	1,162
1966 . . .	257	13,415	8,779	3,874	1,323	1,254
1967 . . .	248	14,365	9,912	4,911	1,090	1,212
1968(*c*) . . .	249	14,817	10,004	4,705	810	937
Rubber—						
1964 . . .	73	33,797	3,703	4,941	1,419	314
1965 . . .	70	33,317	3,768	5,183	1,238	249
1966 . . .	81	35,417	3,998	5,333	1,847	344
1967 . . .	86	37,043	4,177	5,437	1,260	305
1968(*c*) . . .	89	35,878	4,126	5,711	484	167

(*a*) Includes mature and immature areas. (*b*) Includes replacements. (*c*) 30 June.

TERRITORY OF PAPUA AND NEW GUINEA: AREA UNDER PRINCIPAL CROPS AND CROP PRODUCTION, YEAR ENDED 30 JUNE 1968

(*Source: Production Bulletin*, Part I: *Rural Industries*, Bureau of Statistics, Papua)

Crop	*Recorded area in acres*				*Recorded production*			*Average yield per productive acre*		
	Papua	*New Guinea*	*Total*	*Unit*	*Papua*	*New Guinea*	*Total*	*Papua*	*New Guinea*	*Total*
Permanent crops—										
Copra—										
Plantation	33,526	236,650	270,176	ton	9,123	77,613	86,736	0.30	0.39	0.37
Trade(*a*)	..	..	..	,,	371	4,553	4,924	..	..	..
Cacao—										
Plantation	10,837	118,869	129,706	ton (beans)	1,218	16,874	18,092	0.14	0.19	0.18
Trade(*a*)	..	..	..	,,	14	1,102	1,116	..	..	..
Coffee—										
Plantation	918	13,899	14,817	,,	70	4,634	4,705	0.08	0.33	0.32
Trade(*a*)	..	..	..	,,	10	559	569	..	..	..
Rubber	34,506	1,372	35,878	ton (dry)	5,711	..	5,711	0.22	..	0.22
Tea	5	3,741	3,746	lb (dry)	..	151,667	151,667	..	235.5	235.5
Grain crops—										
Maize	33	92	125	bus	458	2,297	2,755	13.88	24.97	22.04
Rice	232	61	293	ton (paddy)	88	72	160	0.38	1.18	0.55
Sorghum	117	961	1,078	bus	2,164	14,984	17,148	18.50	15.59	15.91
Crops for green fodder—										
Maize	29	40	69	..	..	..	..	..	..	..
Sorghum	20	412	432	..	..	..	..	..	..	..
Other	117	1,100	1,217	..	..	..	..	..	..	..
Industrial crops—										
Peanuts	19	4,149	4,168	cwt (kernel)	47	15,199	15,246	2.47	3.66	3.66
Vegetable crops—										
For sale—										
Beans (green)	15	23	38	cwt	327	620	947	21.80	26.96	24.92
Tomatoes	12	26	38	,,	432	873	1,305	36.00	33.58	34.34
Potatoes, English	4	9	13	,,	80	263	343	20.00	29.22	26.38
Potatoes, sweet	56	297	353	,,	1,869	21,628	23,497	33.37	72.82	66.56
Pumpkins	24	22	46	,,	1,094	930	2,024	45.58	42.27	44.00
Other	92	107	199	..	n.a.	n.a.	n.a.	n.a.	n.a	n.a.
For consumption on holding—										
Potatoes, sweet	743	3,713	4,456	cwt	35,021	218,027	253,228	47.13	58.77	56.83
All other	472	1,638	2,110	..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
All other crops	288	1,282	1,570	..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total	82,065	388,463	470,528		..	..	..	..	..	..

(*a*) Includes all produce acquired by purchase during the year from sources outside the holding. (*b*) Not available for publication. (*c*) Included in All other crops. Total area planted to tea was 2,402 acres.

Livestock

Total non-indigenous stockholding was estimated as 22,000 in 1967–68. Indigenous involvement in the cattle industry is being encouraged. An estimated 4,600 head of cattle were owned by indigines in 1967–68. Dairy farming is carried out on a small scale near major towns.

A number of British breeds of cattle are represented, but for best results the use of Zebu crossbred types of cattle is desirable. For dairying the Jersey seems to be the best breed and adapts quite well to tropical conditions.

Central abattoirs controlled by the Administration have been set up at Lae and Port Moresby and there are smaller private slaughterhouses at other centres.

The following table shows the numbers of the various kinds of livestock on non-indigenously occupied holdings in Papua and New Guinea at 30 June 1968.

TERRITORY OF PAPUA AND NEW GUINEA: LIVESTOCK NUMBERS 30 JUNE 1968

(*Source: Production Bulletin*, Part I: *Rural Industries*, Bureau of Statistics, Papua)

Kind of stock	*Papua*	*New Guinea*	*Total*
Horses	401	842	1,243
Cattle—			
For dairying—			
Cows—in milk	488	1,327	1,815
dry	336	979	1,315
Heifers, one year and over . .	163	770	933
Heifer calves, under one year . .	195	696	891
Bulls, one year and over . . .	59	254	313
Bulls under one year . . .	34	161	195
Total dairying cattle . . .	1,275	4,187	5,462
For beef—			
Cows and heifers, one year and over	5,314	20,639	25,953
Calves, under one year . . .	1,218	3,928	5,146
Bulls, one year and over . . .	336	1,016	1,352
Bulls, under one year . . .	167	333	500
Other, one year and over . .	2,904	11,303	14,207
Total beef cattle	9,939	37,219	47,158
Total, all cattle	*11,214*	*41,406*	*52,620*
Sheep	45	345	390
Pigs—			
Boars	100	271	371
Breeding sows	371	907	1,278
Suckers, weaners, and slips . . .	953	2,070	3,023
Other	93	387	480
Total pigs	*1,517*	*3,635*	*5,152*
Goats	521	668	1,189
Poultry(*a*)—			
Fowls	63,624	42,577	106,201
Ducks	1,470	1,364	2,834
Turkeys	230	173	403
Geese	10	46	56
Total poultry	*65,334*	*44,160*	*109,494*

(*a*) Only recorded where poultry products are marketed or flocks exceed 100 birds.

Fishing

Over 1,400 different species of fish are to be found in the coastal and inland waters of Papua and New Guinea and many are important food fish. Those of greatest commercial significance are barramundi, tuna, skipjack, crayfish and prawns. Efforts are being made to encourage indigenous fishermen to regard fishing as a source of cash income and not merely as a means of subsistence. This involves the Administration in research and extension work and requires the improvement of refrigeration, transportation and marketing facilities throughout the Territory. In the Highlands there is increasing interest in fish culture in freshwater ponds.

Native agriculture

Most of the indigenous inhabitants of Papua and New Guinea are agriculturalists producing fruit and vegetables for their own consumption. The crops grown vary according to environment and altitude and include yams, taro and sweet potatoes, coconuts, bananas, papaws, maize, sugar cane, cassava, beans, peanuts, rice, cucurbits, and tobacco. Sago is the staple food in the extensive semi-inundated areas which occur along the lower valleys of the major rivers. In these areas it is cut largely from naturally occurring stands, In other parts of the country small areas of sago are grown along stream banks and in swampy patches and are regarded as a reserve in times of poor harvest. In recent years the indigenes have taken up the production of introduced crops such as peanuts, rice, cucurbits, tobacco and maize for their own consumption, and cocoa, coffee and pyrethrum for export. Some small-scale rubber growing is now being undertaken. In coastal areas large quantities of copra are produced. In 1966–67 estimated indigenous production was: copra 35,000 tons, coffee 10,600 tons, cocoa 5,000 tons. In many localities the indigenes follow a farming system known as bush fallowing rotation, which is described in Year Book No. 48 and earlier issues.

The growing of food is done both by the men and the women. The division of work is usually clearly defined within the village itself, but this division is not necessarily the same in all areas. Generally the felling of forests is done by the men, and carrying the harvested food home to the village is done by the women. Other work, however, such as cultivating, planting and weeding may be done by either men or women according to the customs of the particular village or area.

The advancement of native agriculture for local food supply and improved land use in village gardens as well as for economic production of crops for sale have a high priority in Government policy for the Territory. In recent years the Administration has intensified the programme of agriculture extension work among the indigenes.

Survey of indigenous agriculture and ancillary surveys, 1961–62

A survey of the agriculture of indigenes of Papua and New Guinea was carried out in 1961–62 by the Territory Bureau of Statistics in conjunction with the Commonwealth Bureau of Census and Statistics and the Territory Department of Agriculture, Stock and Fisheries. A comprehensive report on the surveys was published by the Territory Statistician in 1963, and reference should be made to this for further information. A summary of the principal results of the survey appears on pages 1104–10 of Year Book No. 52.

Co-operative societies

Co-operatives are under the supervision and guidance of the Division of Co-operative Extension within the Department of Trade and Industry. A Territory-wide Federation of Co-operative Unions and a Co-operative Wholesale Society were established recently. A new co-operative college to be built at Laloki, near Port Moresby, will replace the existing Co-operative Educational Centre.

For the year ended 31 March 1968 primary societies numbered 316, with a membership of 109,175, a total capital of $2,329,405, and a turnover of $5,378,418. Secondary organisations numbered 14, with 239 member societies, a total capital of $666,840, and a turnover of $1,147,106.

Indigenous labour

The 1966 population census shows that there were 235,000 persons wholly or mainly engaged in the money-raising work force, 200,000 of these being employed in the private sector.

Minimum wages and conditions of employment for indigenous workers are prescribed under the *Native Employment Ordinance* 1958–1967. An employer is required to pay a minimum cash wage to every worker employed by him, and provide the worker, and his family in appropriate cases, with food, clothing, cooking and eating utensils, towels, soap and other articles, medical attention, and, where necessary, accommodation. The estimated minimum cost of providing these entitlements, excluding accommodation, is estimated at $143.00 a year per worker. The value of accommodation varies, but it would be in most cases about $30.00 a year.

The legal minimum cash portion of the wage for unskilled rural workers is $52 a year for the first year of employment, $58.50 in the second year and $65.00 for subsequent years.

In urban areas industrial agreements negotiated between employers and workers' organisations determine the rates of wages payable to workers. Provision is made by legislation for the employer-employee agreements reached to be registered by the Industrial Registrar, and they are then deemed to be judicial awards between the parties, and to have the force of law. Under this system minimum wage rates have been determined for the principal urban centres, and cover an increasing number of workers. In Lae, Rabaul and Madang, the current minimum rate payable as a total cash wage, for unskilled adults or married juniors is $6.75 per week; in Port Moresby and Wewak $6.50; other towns $6.00.

Other provisions of the awards relate to: Annual leave and sick leave (two weeks' leave on full pay and six days' sick leave per annum); the employment of qualified tradesmen (weekly rates of pay $14.00 to $16.00 for second class tradesmen and $18.00 to $20.00 for first class tradesmen); rates of pay and conditions of employment of stevedoring workers and ships' crews; tradesmen who have not completed a formal approved apprenticeship (weekly rates of pay $15.00 to $17.00); and rates of pay and conditions of employment of workers in the timber and sawmilling industries.

There has been a continued expansion of the trade union movement since industrial legislation for the Territory was introduced in March 1963. In December 1968 nineteen associations with a membership of 16,163 had been registered as industrial organisations of workers under the Industrial Organisations Ordinance.

Provision is made in other legislation for the establishment and maintenance of modern standards of industrial safety and for the payment of compensation for injury or disease arising out of, or in the course of, employment.

An apprenticeship scheme was inaugurated in 1955 and reorganised in 1968. An Apprenticeship Board, comprising representatives of private enterprise and government, advises the Administration on apprenticeship matters. By March 1969, 609 apprentices had received trade certificates and 1,186 were under agreement.

Housing

Village housing is still constructed to traditional patterns using local materials including bush timber, bamboo, grass, pit-pit and palm leaves. Town housing is generally constructed from comparatively expensive imported material including fibrous asbestos cement, aluminium and galvanised iron.

The rapid growth of town populations has created a housing shortage. Major programmes are directed towards reducing this backlog. Administration expenditure on housing for local officers was programmed at $2,650,000 in 1968–69.

The Housing Commission completed its first year of operations in 1968–69 building some 300 houses at an average cost of about $2,000. It has commenced construction of proto-type $1,300 units and also offered blocks for builders wishing to demonstrate new building materials.

Secondary industries

The major manufacturing industries are generally those processing primary products, mainly for export. Examples of these are plywood, coconut oil, copra by-products, desiccated coconut and pyrethrum.

Nevertheless industries catering for the rapidly expanding local market remain numerically predominant. These include the brewing of beer, furniture making and assembly of electrical appliances; the production of cigarettes and twist tobacco, concrete products, drums, industrial gases, chemicals, fibreglass products, nails and other wire products, packaging and paper products, paints, metal louvre frames, terrazzo and other building materials; and printing and ship-building.

A wide variety of services has also been established such as engineering workshops, plumbing establishments, motor repairs and electrical services.

TERRITORY OF PAPUA AND NEW GUINEA: SUMMARY OF FACTORY OPERATIONS, 1966-67 AND 1967-68p

(*Source: Production Bulletin*, Part II: *Secondary Industries*, Bureau of Statistics, Papua)

		Papua		*New Guinea*		*Total*	
		1966–67	*1967–68*	*1966–67*	*1967–68*	*1966–67*	*1967–68*
Number of factories(*a*)		178	193	301	355	479	548
Average number employed(*b*)		4,316	4,231	6,678	7,201	10,994	11,432
Salaries and wages paid(*c*)	$'000	4,378	4,860	5,767	7,396	10,146	12,256
Value of power, fuel, light, etc., used(*d*)	,,	578	526	1,083	1,177	1,661	1,703
Value of materials used(*e*)	,,	8,618	8,728	20,257	25,422	28,875	34,150
Value of production(*f*)	,,	9,228	10,712	15,860	19,255	25,088	29,968
Value of output(*g*)	,,	18,424	19,967	37,200	45,854	55,624	65,821
Value of land and buildings(*h*)	,,	6,705	7,855	7,449	9,309	14,153	17,164
Value of plant and machinery(*h*)	,,	5,987	12,370	7,702	8,323	13,689	20,693

(*a*) Any factory, workshop or mill in which four or more persons are employed or power other than hand is used. (*b*) Average weekly employment including working proprietors. (*c*) Excludes drawings by working proprietors. (*d*) Includes water and lubricating oil. (*e*) Includes value of containers, packing, etc., tools replaced, and repairs to plant. (*f*) Value added in process of manufacture (i.e. value of output less value of materials and power, fuel, etc. used). (*g*) Value of goods produced including amounts received for repair work and other work done. (*h*) Depreciated or book value at end of year, including estimated value of rented premises and machinery.

TERRITORY OF PAPUA AND NEW GUINEA: FACTORY OPERATIONS BY CLASS OF INDUSTRY, 1967-68 p

(*Source: Production Bulletin*, Part II: *Secondary Industries*, Bureau of Statistics, Papua)

		Class of industry				
		Industrial metals, machines and conveyances	*Food, drink and tobacco*	*Sawmills, plywood and joinery*	*Other industries*	*Total*
Number of factories		256	83	143	66	548
Number of employees—						
Non-indigenous		n.a.	n.a.	n.a.	n.a.	2,084
Indigenous		n.a.	n.a.	n.a.	n.a.	9,348
Total employees		*3,794*	*2,342*	*3,796*	*1,500*	*11,432*
Salaries and wages paid	$'000	5,793	1,618	2,984	1,860	12,256
Value of power, fuel and light, etc.	,,	286	438	307	672	1,703
Value of materials used	,,	7,787	10,653	5,907	9,803	34,150
Value of production	,,	9,995	6,645	7,138	6,190	29,968
Value of output	,,	18,068	17,736	13,351	16,666	65,821

See footnotes to previous table.

NOTE. Electricity generation is included in 'Other industries'.

Finance

Revenue and expenditure

Information on the financial operations of each Territory will be found on pages 1183–4 and 1189–90.

Taxation

The main forms of taxation are income tax and import duties. *Income Tax* was imposed on 1 August 1959 to operate from 1 July 1959. In the case of individuals two different methods of calculating tax payable are used. Tax on taxable incomes has applied since 1 July 1959 and is calculated on a similar basis to that in Australia. The scale of taxation is about 50 per cent of the tax payable on the same taxable income in Australia. Deductions for dependants the taxpayer is maintaining are considerably higher than those allowed in Australia. Tax on chargeable income was introduced to apply from 1 January 1967 and has supplanted a previous *Personal Tax* of $4.00 payable by all males eighteen years and over. Chargeable income consists of gross income less expenses directly incurred in earning the income. No deductions are allowable for dependants or any other private expenditure such as medical or education expenses. The tax is a flat rate of 2.025 cents in the $1 applying on income above $416 with a maximum of $20.50. The two methods of calculating tax payable are supplementary, the method applied to any particular taxpayer being the one resulting in the greater amount of tax payable. Companies are taxed on a similar basis to that in Australia, and deductions allowable are generally comparable to those in Australia. From 1 July 1959 to 30 June 1967 the rates on public and private companies differed, public companies being taxed at a flat rate of 20 cents in the $1 and private companies at 12.5 cents in the $1 for the first $10,000 and 17.5 cents in the $1 for the remainder. From 1 July 1967 a flat rate of 22.5 cents in the $1 applies to all companies, and from the same date private companies are no longer required to distribute a portion of their income in dividends each year. To encourage industry in the Territory certain companies manufacturing products new to the Territory may be granted complete tax exemption for the first five years of operation under the *Industrial Development* (*Incentive to Pioneer Industries*) *Ordinance* 1965. Additionally to income taxes Native Local Government Councils (which are formed voluntarily by the indigenes) are empowered to levy local taxes for the purpose of providing for local services carried out by the councils. These taxes are set off against the taxpayers' personal taxation.

The present *Customs Tariff* provides high revenue rates on imports of ale, spirits, tobacco and cigarettes, timepieces, cigarette papers, fancy goods, and jewellery, but allows entry of most necessities affecting living and building costs duty free or at a low rate of duty. Under the Customs Tariff, plant, machinery and chemicals to be used mainly for industrial and developmental purposes are generally duty-free. A by-law covers goods imported by passengers. No preferential rates are specified in the schedule. Export duties imposed on copra, cocoa, rubber, mother-of-pearl, trochus and burgos shell, and gold were repealed in July 1959.

Provision is made in the *Australian Customs Tariff* (*Papua and New Guinea Preference*) 1936 for the free entry into Australia of certain agricultural goods produced in and imported direct from the Territory (*see* chapter Overseas Transactions). In addition, goods produced or manufactured in the Territory and imported directly into Australia are exempted from primage duty.

Banking

The banking system in the Territory of Papua and New Guinea is based on Australia's, and provides full trading and savings bank facilities. Four Australian trading banks have branches in the main centres. They are: the Commonwealth Trading Bank of Australia, the Bank of New South Wales, the Australia and New Zealand Bank and the National Bank of Australasia Ltd. Affiliates or subsidiaries of banking institutions operate savings banks in the Territory. Rates of interest for bank deposits and advances are the same as those applying in Australia. A branch of the Reserve Bank of Australia in Port Moresby carries out central bank functions and acts as banker for the Administration and Commonwealth Government Departments in the Territory. The Territory uses the same currency as Australia.

The Banking (Foreign Exchange) Regulations of the Commonwealth of Australia apply to the Territory of Papua and New Guinea. The Regulations are administered by the Reserve Bank of Australia in a way that is consistent with the policy of encouraging overseas investment in Australia and the Territory. All remittances abroad require exchange control approval, though in practice no restrictions are imposed on current transactions and the trading banks have been authorised to deal with the great majority of these transactions as agents of the Reserve Bank.

The Papua and New Guinea Development Bank which opened in July 1967, has as its prime objective the provision of funds to assist individuals and enterprises in developing the Territory. The Bank was established to provide finance where it was not otherwise available on reasonable terms and conditions. Both indigenes and non-indigenes can qualify for advances. When considering applications the Bank is concerned mostly with the borrower's prospects for success rather than his security.

Average weekly deposits of cheque-paying banks in the Territory of Papua and New Guinea for the year 1967–68 were $34,758,000 and loans, advances, etc., $18,393,000. Average weekly debits to customers' accounts amounted to $14,075,000. Savings banks depositors' balances at 30 June 1968 amounted to $32,896,000, comprising indigenous $12,252,000 and non-indigenous $20,644,000, having increased since June 1958 from $2,311,000 and $6,352,000 respectively.

TERRITORY OF PAPUA

General description

Area, etc.

Papua lies wholly within the tropics. The northernmost point touches 5° S. latitude; its southernmost portion, comprising Tagula and Rossel Islands, lies between 11° S. and 12° S. latitude. It is separated from Australia by Torres Strait. The length of Papua from east to west is upwards of 930 miles; towards either end the breadth from north to south is about 320 miles, but about the centre it is considerably narrower. The Territory includes also the islands of the Trobriand, Woodlark, D'Entrecasteaux, and Louisiade groups. The length of coast-line is estimated at 3,664 miles—1,728 on the mainland and 1,936 on the islands. The total area is 86,100 square miles, of which 83,325 are on the mainland and 2,775 on the islands. A description of the physical characteristics of the Territory appears in earlier issues of the Year Book (*see* No. 18, page 633) and in the Administration Annual Reports.

Administration

Particulars of the early administration of Papua are given in Year Book No. 19, page 576. The Territory was placed under the authority of the Commonwealth on 1 September 1906 by proclamation issued in pursuance of Letters Patent of 18 March 1902 and was accepted by the Commonwealth by the *Papua Act* 1905, which came into force by virtue of the aforesaid proclamation. The transfer was made under the authority of Section 122 of the Constitution. The Territory is under the control of the Commonwealth, but not included within it, and is divided into seven administrative districts, Southern Highlands Chimbu (part), Western, Gulf, Central, Milne Bay, and Northern.

Population

Indigenous population

Within the major division, Melanesian, into which most indigenous inhabitants of the Territory are classified, a distinction may be made between a Melanesian type and a Papuan type, the former representative of the eastern mainland and the island archipelagos to the east and south-east, and the latter representative of the western third and the interior of the Territory. Some negrito traits have been noted in a few of the inland mountain groups. The indigenous population of the Territory of Papua as recorded in the 1966 census is shown on page 1165. The estimated indigenous population for 30 June 1968 was 598,825 persons, comprising Central, 117,471; Gulf, 64,708; Milne Bay, 102,513; Northern, 56,934; Southern Highlands, 192,260; and Western, 64,939.

Non-indigenous population

Preliminary results of the numbers of non-indigenous population from the 1966 census are given on page 1164. The estimated non-indigenous population for 30 June 1967 was 8,290 males, 6,436 females, 14,726 persons.

Land tenure

The basic principles applying to land tenure in Papua are the same as those applying to the whole of the Territory of Papua and New Guinea described on pages 1171–1172. At 30 June 1968, of the total area of Papua, 55,102,000 acres, only 1,928,718 acres had been alienated. The distribution of alienated land at 30 June 1968 according to tenure was as follows: held by private non-indigenous inhabitants, freehold, 24,280 acres; land tenure conversions, freehold, 4,448 acres; leasehold, 388,295 acres; native reserves, 67,255 acres; other Administration land, including land reserved for public purposes, 1,444,440 acres.

Although a small amount of freehold land exists in Papua, present legislation does not provide for the granting of estates in freehold. Leases of various kinds may be granted by the Administration. The principal types of leases available are agricultural leases, pastoral leases, leases of town allotments, business leases and residence leases of other than town allotments, and various forms of special leases and licences over land. Leasehold terms are liberal, and, in general, leases may be granted for periods of up to ninety-nine years. Rent is based on the unimproved value of the land.

Leases of Crown land are granted by the Administrator following a land use examination, advertisement of leases available, and consideration of applications by the Land Board. Dealings in privately-owned land are a matter for private treaty. Native-owned land, however, cannot be acquired or leased from the native owners by private individuals. The Administration alone may purchase native-owned land, and then only if the owners are willing to sell and the Administration is satisfied that the owners do not require, and are not likely to require, the land.

The registration of titles, interests and dealings in alienated land is provided for under the *Real Property Ordinance* 1913–1962, modelled on the Torrens system of land registration.

Production

Primary production

The products of the Territory are obtained principally from its agricultural, forestry, mining, and fishing industries. Native subsistence agriculture, fishing and hunting produce most of the food requirements of the indigenous population. The main native agricultural products are taro, yams, sweet potatoes, bananas, and pawpaws. Peanuts are becoming of increasing importance in native diet. Non-indigenous enterprise produces most of the commodities exported. Indigenes, however, produce copra for export, while native enterprise in other fields of agricultural production for export purposes, e.g. cocoa and coffee, is undertaken. The principal agricultural products of Papua for the export trade are copra and rubber. Native production of copra is increasing. The fishing industry is also of increasing importance. Gold, manganese, zinc-lead, and copper ores have been mined in commercial quantities in the past, but current production is limited.

For information on the agricultural and animal industries, which for the sake of convenience covers the Territories of Papua and New Guinea singly and combined, *see* pages 1171–1175. The following paragraphs relate to forestry, mining, fisheries, and water-power resources in Papua.

Forestry

A general description of the forest policy, which applies in Papua as well as in the Trust Territory of New Guinea, is given under the heading, Timber, on page 1186.

Mixed species of tropical rain forest covers most of Papua, although north-east of Port Moresby there is an area of monsoonal savannah country. Because of the mixed nature of the timbers in any one area, their utilisation on an economical basis is somewhat difficult. Mangroves occur in large areas fringing the Gulf of Papua. Forestry field work is carried out in Papua with a view to assessing the forest resources available and also to survey areas subsequently made available for cutting.

At 30 June 1968 twenty-two permits and thirty-six licences were current. The total areas of forest involved were 334,324 acres and 69,573 acres respectively. The total number of logging mills was twenty-one and the total sawn-timber produced during 1967–68 was 9.7 million super feet.

Mining

Although a large number of minerals have been found in Papua, including platinum, gold, silver, copper, tin, lead, zinc, cinnabar, iron, osmiridium, manganese, sulphur, chromite, gypsum, and lignite, current mineral production is not of economic importance. Before the 1939–45 War gold was an important item in Papuan production, but it has since dwindled to insignificance. Large quantities of copper ore were mined and exported up to 1940. Extensive deposits of magnetite sands exist along the Gulf of Papua coastline, but these contain the undesirable impurity titanium, and ways of separating this from magnetite are under investigation. The *Mining Ordinance* 1937–1966 and the *Mining Development Ordinance* 1955–1960 control mining in Papua.

Indications of oil have been found at scattered locations over a large area, but commercial quantities have not been discovered. Natural gas has been found in several wells, but its commercial use is not yet economically feasible. At 30 June 1968 eighteen permits and licences were effective under the provisions of the *Petroleum* (*Prospecting and Mining*) *Ordinance* 1951–1965. Oil prospecting is confined mainly to the Gulf and Western Districts, including off-shore areas in the Gulf of Papua.

Fisheries

The fishing industry in Papua is considered to have considerable potential. In 1967–68 the most important export from Papua and New Guinea was 888,410 lb of frozen crayfish tails and prawns from the north coast of Papua, valued at $977,627. Exports of barramundi to Australia are also important. Two large international firms are surveying the potential for commercial prawn fishing ventures.

Two cultured pearl farms have recently commenced production of both round and half pearls of high quality.

Water power

Most of the rivers in Papua carry a large volume of water from a great height over a relatively short distance, thereby offering opportunities for the installation of hydro-electric power plants. It is estimated that at least 1,850 MW could be developed.

The Rouna No. 1 hydro station on the Laloki River near Port Moresby has a capacity of 5.5 MW. A second hydro station, Rouna No. 2, came into operation in 1967, with an initial installed capacity of 18 MW. Total planned capacity of this station is 30 MW.

Trade, transport and communication

Value of imports and exports

TERRITORY OF PAPUA: IMPORTS AND EXPORTS, 1963-64 TO 1967-68
($'000)
(*Source: Overseas Trade Statistics, Bureau of Statistics, Papua*)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Total imports(a)	*27,617*	*32,733*	*42,865*	*49,922*	*61,059*
Exports—					
Domestic exports	5,318	6,075	6,113	5,417	6,503
Re-exports	1,857	2,970	2,827	3,421	4,842
Total exports	*7,175*	*9,046*	*8,940*	*8,838*	*11,346*

(*a*) Includes outside packages.

Country of origin or destination

TERRITORY OF PAPUA: COUNTRY OF ORIGIN OF IMPORTS
1963-64 TO 1967-68
($'000)
(*Source: Overseas Trade Statistics, Bureau of Statistics, Papua*)

Country of origin	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Australia	17,568	20,305	25,986	31,243	32,031
Canada	60	73	220	437	169
China (mainland)	156	250	312	529	319
Germany (Federal Republic of)	582	567	676	663	686
Hong Kong	966	1,011	1,132	1,348	1,086
Indonesia	862	493	31	90	2
Japan	1,575	1,977	3,112	4,167	4,218
Malaysia (including Singapore)	389	626	962	1,460	1,357
United Kingdom	1,648	2,186	3,027	2,711	2,617
United States of America	1,775	2,924	2,925	3,214	14,127
Other countries	2,035	2,321	4,481	4,060	4,447
Total	**27,617**	**32,733**	**42,865**	**49,922**	**61,059**

TERRITORY OF PAPUA: COUNTRY OF DESTINATION OF EXPORTS
1963-64 TO 1967-68
($'000)
(*Source: Overseas Trade Statistics, Bureau of Statistics, Papua*)

Country of destination	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Australia	5,752	6,837	6,771	6,993	8,166
Japan	290	238	280	430	1,588
United Kingdom	650	1,220	1,172	926	1,130
Other countries	483	751	717	489	462
Total	**7,175**	**9,046**	**8,940**	**8,838**	**11,346**

Principal commodities exported

TERRITORY OF PAPUA: PRINCIPAL DOMESTIC EXPORTS
1963-64 TO 1967-68
($'000)
(*Source: Overseas Trade Statistics, Bureau of Statistics, Papua*)

Commodity	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Rubber	2,434	2,551	2,561	2,475	1,956
Copra	1,968	2,805	2,550	2,083	2,800
Cocoa beans	100	71	123	209	153
Gold	1	2	2	1	2
Shell (marine)	25	26	17	25	19
Crocodile skins	529	392	623	344	274
Crayfish and prawns	10	12	17	33	978
Other	251	216	220	247	321
Total	**5,318**	**6,075**	**6,113**	**5,417**	**6,503**

Shipping

In 1967–68 shipping entries (overseas and inter-Territory vessels) at Territory ports totalled 545, and 302,652 tons of cargo were discharged and 90,574 tons were loaded. Corresponding figures for 1966–67 were 563, 298,976 and 89,830 respectively.

Regular passenger and freight services operate between Australia, New Guinea and Papua. Vessels trading between Australia and the East also call at Territory ports, and there are services from continental and United Kingdom ports. Coastal and inter-island shipping services are maintained by vessels operating from the two principal ports of Port Moresby and Samarai.

Other forms of transport and communication

Scheduled flights provide a network of air transport throughout Papua, and regular air services link the Territory with Australia and neighbouring Territories, and also with Manila and Hong Kong. There were 377 licensed aerodromes in the whole of Papua and New Guinea at 30 June 1968, and of these 12 were the responsibility of the Department of Civil Aviation, 125 of the Administration, and 240 were privately owned. Much of the internal traffic and freight is carried on a charter basis.

At 30 June 1968 there were 2,164 miles of roads in Papua of which 345 were adequately paved. Total motor vehicle registrations (excluding defence force vehicles) at 31 December 1967 were 8,228.

Telephone services operate in the main centres. The radio station at Port Moresby for both transmission and reception is shared by the Overseas Telecommunications Commission and the Administration. The former provides all external radio-telephone and telex circuits, while the latter operates internal telephone and telegraph services. Trunk line services are available at Port Moresby, Daru, Popondetta, Kerema, Samarai, and Tapini. Continuous telephone services are available at Port Moresby, Samarai, and Sogeri, and a limited service at Daru, Popondetta, Kerema, and Tapini. Port Moresby is connected by direct radio-telephone trunk circuits with Popondetta and Samarai and with Lae, Rabaul and Wewak in New Guinea. Radio telegraph services are provided from Port Moresby, Samarai, Kerema, and Daru to nearly 300 outstations. The Australian Broadcasting Commission broadcasts from medium wave station 9PA and short wave stations VLK and VLT located at Port Moresby. The Administration Department of Information and Extension Services operates transmitters at Alotan, Daru and Kerema and produces programmes in several local languages covering news, health features, general information and programmes of local and regional significance.

Education and health

Education

Education in the Territory is provided by the Administration and various Mission organisations. Schools for indigenes, also, have been established by Local Government Councils. The *Education Ordinance* 1952–63 enables the Administration to establish an education advisory board, district education committees and European and native schools, and to grant financial aid for educational purposes. European teachers are recruited from Australia and overseas, and indigenous teachers are trained in the Territory by the Administration and Missions. During the year ended 30 June 1968, 168 schools were maintained by the Administration for 32,276 children. The total number of pupils in the various grades of mission schools was 39,426. To assist the educational work of the Missions the Administration provides expert advice, educational equipment and text-books. In addition, the sum of $571,621 was distributed among the Missions as grants-in-aid during the year ended 30 June 1968.

Health

The Department of Public Health of the Territory of Papua and New Guinea has the general oversight of all medical and dental services. The Department has the following seven functional divisions: medical services; preventive medicine; medical training; infant, child and maternal health; medical research; administration; and mental health. The services for the Territory of Papua are under the administrative control of a regional medical officer, with headquarters staff at Port Moresby.

The cases treated in hospitals are mainly pneumonia, gastro-enteritis, skin disease, malaria, accidents, diseases due to old age, and confinements. At 30 June 1968 the Administration had established 32 general hospitals, 2 hospitals for the treatment of Hansen's disease, 1 Hansenide-tuberculosis hospital, 2 tuberculosis hospitals, and 1 mental hospital; the Missions had established 25 general hospitals, 2 Hansenide hospitals, and 2 tuberculosis hospitals. There were 879 village aid posts or medical centres (112 Mission), 30 maternal and child welfare clinics (66 Mission), and 600 mobile clinic centres (1,523 Mission). School medical examinations, immunisation, ante-natal and post-natal care, and pre-school services are also provided. The Missions employ their own doctors and nurses in their medical establishments.

For some years suitably qualified indigenes attended the Central Medical School at Suva, Fiji, to be trained as Assistant Medical Officers. In 1959 the Administration began training indigenous medical officers at the Papuan Medical College which is associated with the Port Moresby General Hospital. The College, planned to accommodate 600 students eventually, is being built in stages. The course consists of a preliminary year and five years further study. Training for nurses and medical auxiliaries in many categories is also being provided.

Finance

TERRITORY OF PAPUA: REVENUE AND EXPENDITURE, 1963-64 TO 1967-68
($'000)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
REVENUE					
Customs	3,109	3,548	4,832	5,879	6,119
Licences	136	156	192	237	278
Stamp duties	81	145	158	250	239
Postal	856	1,090	1,437	1,848	1,883
Land revenue	152	151	318	345	364
Mining receipts	7	10	12	14	21
Fees and fines	36	56	85	117	131
Health revenue	93	92	108	117	132
Forestry	74	73	97	88	93
Agriculture	96	76	91	113	191
Public utilities	315	279	352	388	588
Direct taxation(*a*)	3,646	4,917	5,705	8,255	9,144
Miscellaneous	1,888	2,428	3,475	3,810	4,336
Territory loans	..	..	(*b*)2,485	2,141	2,809
Total internal revenue	*10,489*	*13,023*	*19,347*	*23,602*	*26,328*
Grant by Commonwealth of Australia	20,022	22,125	23,821	19,804	23,140
Total revenue	**30,511**	**35,148**	**43,168**	**43,406**	**49,468**

(*a*) Includes Personal Tax. (*b*) Previously deducted from expenditure.

TERRITORY OF PAPUA: REVENUE AND EXPENDITURE 1963–64 TO 1967–68—*continued*

($'000)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
EXPENDITURE					
Expenditure from revenue—					
Special appropriations	556	874	1,333	1,396	(*a*)932
Departments—					
Administrator—					
Administrator	627	380	446	538	434
Legislative and Administrator's Councils(*b*)	43	97	123	145	141
Information and Extension Services	175	200	296	290	344
Public Service Commissioner(*c*)	222	246	319	429	425
Treasury—					
Central Treasury	1,501	1,641	1,705	3,983	2,053
Taxation Branch	52	60	69	75	92
Motor Transport Branch	512	564	702	846	928
Stores and Supply Branch(*d*)	2,712	2,761	3,019	2,475	2,991
Government Printing Office	76	88	110	100	105
Public Health	2,775	2,997	3,308	3,385	3,286
District Administration(*e*)	1,231	1,547	1,812	1,631	1,841
Agriculture, Stock and Fisheries	1,062	1,334	1,564	1,407	1,580
Education	3,007	3,852	4,554	4,638	5,444
Labour	99	140	186	189	192
Police	716	893	1,193	1,973	2,104
Law—					
Law(*f*)	200	241	357	381	425
Corrective Institutions Branch	116	137	191	385	415
Lands, Surveys and Mines	515	645	617	729	755
Forests	178	220	316	287	350
Posts and Telegraphs	1,200	1,311	1,585	1,794	2,002
Trade and Industry(*g*)	542	746	936	738	1,334
Public Works—					
Public works	575	1,300	1,274	1,298	1,844
Maintenance	3,141	3,573	3,569	3,815	3,803
Capital works and services(*h*)	7,158	7,525	11,801	8,687	11,151
Purchase of capital assets	1,520	1,618	1,883	1,673	(*i*)
General overheads	..	..	..	..	694
Other institutions(*j*)	..	..	..	..	2,877
Surplus	..	..	..	..	211
Expenditure from revenue	*30,511*	*34,988*	*43,268*	*43,286*	*48,754*
Expenditure chargeable to Loan Fund	1,277	2,407	..	..	..
Total expenditure	**31,787**	**37,395**	**43,268**	**43,286**	**48,754**

(*a*) Special appropriations have been reduced by taxation refunds and refunds of revenue. (*b*) Includes the Administrator's Council which replaced the Executive Council during 1960–61 and the House of Assembly which replaced the Legislative Council during 1963–64. (*c*) Includes expenditure of the Administrative College. (*d*) Includes costs of general stores for all departments except Public Works. (*e*) Before 1964–65, Department of Native Affairs. (*f*) Up to 1963–64 the Land Titles Commission was included in the Department of Law. The two figures have been combined for 1964–65 and 1965–66. (*g*) Includes Trade and Industry, Customs and Migration, and Marine. (*h*) Additional expenditure on this item included under 'Expenditure chargeable to Loan Fund'. (*i*) 'Capital Purchases' has been distributed among the individual departments. (*j*) Grants and loans by individual departments have been brought together under 'Other institutions'.

TRUST TERRITORY OF NEW GUINEA

General description

Area, etc.

The Trust Territory of New Guinea extends almost from the equator to latitude 8° S., a distance of 400 nautical miles, and from longitude 141° E. to 160° E., a distance of 1,000 nautical miles. The land area is 92,160 square miles, that of the New Guinea mainland being 69,095 square miles and that of adjacent islands, including the two northernmost islands of the Solomon Islands, Buka and Bougainville, and the Bismarck Archipelago, 23,065 square miles. Information regarding physiography and climate will be found in Year Book No. 22, page 613, in the *Official Handbook of the Territory of New Guinea*, and the Administration Annual Reports.

Administration

The terms of the League of Nations mandate (1920) of the former German possession of New Guinea are given in Year Book No. 33 (*see* page 264). Particulars of the administration of the Territory of New Guinea prior to the setting-up of the Papua and New Guinea Administration are given in Year Book No. 36 and earlier issues, and of events following the outbreak of the Pacific War in Year Book No. 37 and subsequent issues up to No. 48.

Following the 1939–45 War the Commonwealth Government undertook to place the Territory of New Guinea under the Trusteeship System established under the Charter of the United Nations. The Trusteeship Agreement for the Territory, under which the Government of Australia is the sole administering authority, was approved by the General Assembly of the United Nations Organization on 13 December 1946. The terms of the Agreement are shown in Year Book No. 39, pages 355–7.

For administrative purposes the Territory is divided into the following twelve districts: East New Britain and West New Britain, comprising New Britain and the adjacent islands; Morobe, Madang, Eastern Highlands, Chimbu, Western Highlands, East Sepik and West Sepik on the mainland; New Ireland, comprising New Ireland, Lavongai and adjacent islands; Manus, comprising the Admiralty Group; and Bougainville in the Solomon Islands. Each district is administered by a District Commissioner.

Population

Indigenous population

The indigenous people of the Territory may in general be grouped with the Melanesians who occupy the greater part of the Western Pacific. They may be divided into two main types—Melanesian and Papuan—the former, with a few exceptions, constituting the population of the Bismarck Archipelago, the Solomon Islands and the coastal districts of the New Guinea mainland, the latter inhabiting the interior of the mainland. Some tribes of Negritos exist in the mountains of New Guinea. There is a strain of Papuan, and, possibly, of Polynesian blood in the Admiralty Islanders, while the Western Islanders and the inhabitants of the small islands east and south-east of New Ireland are Micronesians. (*See* Year Book No. 16, page 670, and *Official Handbook of the Territory of New Guinea*, Part V.)

The indigenous population of the Territory at the Census of 30 June 1966 is shown on page 1165. At 30 June 1968 the estimated indigenous population was 1,677,807 persons, comprising Bougainville, 72,393; Eastern Highlands, 218,018; Chimbu, 180,570; Western Highlands, 317,686; Madang, 158,609; Manus, 23,126; Morobe, 230,026; East New Britain, 91,279; West New Britain, 50,120; New Ireland, 53,507; East Sepik, 162,274; and West Sepik, 120,199.

Non-indigenous population

The non-indigenous population of the Territory of New Guinea at the 1966 Census is shown on page 1164. At 30 June 1967 the estimated non-indigenous population of the Territory was 13,685 males, 9,671 females, 23,356 persons.

Land tenure

The principles governing the acquisition and ownership of land and types of tenure available in New Guinea are in general similar to those which obtain in Papua, and grants of estates are restricted to leasehold tenure. In New Guinea, however, the amount of freehold land of earlier origin held by private non-indigenous owners amounts to more than half a million acres. Freehold titles to this land, which includes a good deal of plantation land, may be transferred by purchase, subject only to the general provision that dealings in land require the approval of the Administrator.

The area of the Territory of New Guinea is estimated at approximately 59,000,000 acres, of which at 30 June 1968 only 1,851,100 acres were alienated. The following was the distribution of alienated land according to tenure at 30 June 1968: held by private non-indigenous inhabitants—freehold, 516,558 acres, leasehold, 441,235 acres; native reserves, 26,810 acres; other Administration land, including land reserved for public purposes, 865,997 acres.

Under German law there was a system of registration of titles in a Ground Book, but registration did not necessarily confer an indefeasible title. The German system has been replaced by one modelled on the Torrens plan, embodied in the *Lands Registration Ordinance* 1924–1962. The land registers were lost during the 1939–45 War, but provision for restoration of the lost titles is made in the *New Guinea Land Titles Restoration Ordinance* 1951–1966.

Production

The products of the Territory are obtained principally from its agricultural, mining, fishing, and forestry industries. A copra crushing mill near Rabaul, established in 1952, commenced crushing at about 18,000 tons of copra per annum, and its capacity is now about 60,000 tons of copra per annum. Early in 1968 a factory capable of manufacturing 7,000 tons of dessicated coconut a year was established also near Rabaul. At Bulolo a company is producing high quality moisture-proof plywood in a factory with an approximate annual plywood production of 28 million square feet (on a $\frac{3}{16}$in basis). Native subsistence agriculture, fishing and hunting produce most of the food requirements of the indigenous population. The main native agricultural products are taro, yams, sweet potatoes, coconuts, bananas, papaws. Non-indigenous enterprise produces most of the commodities exported. Indigenes, however, produce copra for export, and in recent years have taken up the production of introduced crops such as peanuts, rice, cucurbits, and maize for their own consumption and cocoa, coffee and pyrethrum for export. The principal agricultural products of New Guinea for the export trade are copra and coconut oil, cocoa, and coffee, but exports of timber and timber products are substantial. The fishing industry is based upon the supply of fish to local markets, and the export of small quantities of shell. Gold is the principal mineral mined. Indigenes are taking an increasing interest in mining for alluvial gold on their own account, and production from this source is continually rising, in contrast to falling European production.

For information on the agricultural and animal industries, which for the sake of convenience covers the Territories of Papua and New Guinea singly and combined, *see* pages 1171–5. The following paragraphs relate to the timber, fishing and mining industries in the Territory of New Guinea alone.

Timber

Various species of timber are found in the Territory, and one accessible pure stand is the valuable pine forests of the Bulolo Valley. This timber is used mainly for the production of plywood and veneer. The Territory forests also provide flitches, battery veneer, and egg-case parts. The Administration operates a training centre for forestry workers, nurseries and a herbarium, and has established a research institute at Hohola near Port Moresby.

The Government intends to make available a number of large-scale permit areas containing from 2,000 to 5,000 million super feet of timber to help overcome the problems of multiplicity of species and continuity of supply of particular species. In opening up these major permit areas consultants are being employed to investigate the forest resources, assess the market potential and recommend working places and forms of processing for each area. Present policy calls for the orderly development of the timber industry on sound forestry principles to ensure no waste of the resources and no over-exploitation. Timber growing on native lands cannot be acquired by private purchasers direct from the native people, but must be obtained through the Administration. Royalty is payable on all forest produce taken under permit or licence. Royalties are negotiable in many instances. Reafforestation of areas dedicated for forestry in perpetuity is carried out by the Administration.

At 30 June 1968, 68 permits and 20 licences were current, the total areas of forest involved being 846,635 acres and 76,985 acres respectively. The total number of logging mills was 50, and the total sawn timber produced during 1967–68 was 30.1 million super feet.

Mining

The production of gold and associated silver is the most important mining activity in New Guinea, although other minerals, such as osmiridium, platinum, copper, iron ore, sulphur, and brown coal, have been discovered. The production of gold in New Guinea since the 1939–45 War has been on a much smaller scale than before the war, decreasing from $1,410,000 in 1959–60 to $823,749 in 1967–68. The discovery of extensive low-grade copper deposits on Bougainville has given impetus to the copper industry in the Territory.

The laws in operation governing mining are the *Mining Ordinance* 1928–1966, the *Mines and Works Regulation Ordinance* 1935–1962 and the *Mining Development Ordinance* 1955–1960 and the regulations made thereunder.

The *Petroleum (Prospecting and Mining) Ordinance* 1951–1967 deals with the issue of permits and the granting of licences and leases for oil exploration. There were three prospecting permits for oil current at June 1967.

Water power

An approach was made during 1966–67 to the International Bank for Reconstruction and Development with regard to a loan for the Upper Ramu Hydro-electric Scheme, a 72 MW project planned for supplying Lae, Madang, Goroka, Mount Hagen, and intervening areas. Further investigations recommended by the Bank are being carried out.

Trade, transport and communication

Value of imports and exports

TERRITORY OF NEW GUINEA: IMPORTS AND EXPORTS
1963-64 TO 1967-68
($'000)
(*Source: Overseas Trade Statistics, Bureau of Statistics, Papua*)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Total imports(a)	*43,119*	*54,113*	*67,566*	*76,109*	*84,244*
Exports—					
Domestic exports	31,342	37,237	37,431	40,262	52,382
Re-exports	2,372	2,858	3,458	4,120	6,523
Total exports	*33,714*	*40,095*	*40,889*	*44,382*	*58,905*

(*a*) Includes outside packages.

Countries of origin or destination

TERRITORY OF NEW GUINEA: COUNTRY OF ORIGIN
OF IMPORTS(*a*), 1963-64 TO 1967-68
($'000)
(*Source: Overseas Trade Statistics, Bureau of Statistics, Papua*)

Country of origin	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Australia	24,029	29,355	36,466	40,002	46,048
China (mainland)	587	991	1,288	1,728	1,396
Germany (Federal Republic of)	1,433	1,909	1,644	2,024	2,053
Hong Kong	2,625	2,657	2,913	2,958	3,498
India	303	250	449	313	207
Indonesia	427	184	98	81	6
Japan	3,749	5,427	6,884	8,906	10,229
Malaysia (including Singapore)	885	852	2,376	1,991	2,426
Netherlands	343	390	346	4,049	551
United Kingdom	2,752	4,404	5,617	4,430	4,596
United States of America	2,782	3,436	4,583	4,590	5,486
Other countries	3,204	4,258	4,902	5,037	7,748
Total	**43,119**	**54,113**	**67,566**	**76,109**	**84,244**

(*a*) Includes outside packages.

TERRITORY OF NEW GUINEA: COUNTRY OF DESTINATION OF EXPORTS, 1963-64 TO 1967-68

($'000)

(*Source: Overseas Trade Statistics, Bureau of Statistics, Papua*)

Country of destination	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Australia	14,936	16,758	16,274	17,864	21,122
Germany (Federal Republic of)	1,616	2,690	2,255	3,017	4,607
Japan	1,569	1,547	1,700	2,364	3,065
Netherlands	2,218	1,625	1,436	1,071	2,175
United Kingdom . . .	10,976	13,849	15,405	13,617	19,149
Other countries . . .	2,399	3,626	3,819	6,449	8,787
Total	**33,714**	**40,095**	**40,889**	**44,382**	**58,905**

Principal commodities exported

TERRITORY OF NEW GUINEA: PRINCIPAL DOMESTIC EXPORTS 1963-64 TO 1967-68

($'000)

(*Source: Overseas Trade Statistics, Bureau of Statistics, Papua*)

Commodity	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Copra	8,050	9,604	11,749	7,911	11,143
Other coconut products . .	5,190	7,404	6,589	5,840	7,405
Cocoa beans	6,743	6,977	4,311	9,336	11,641
Coffee beans	5,326	7,276	8,712	10,095	14,306
Peanuts	573	461	527	526	430
Crocodile skins . . .	377	464	377	392	235
Gold	1,320	1,076	945	913	823
Shell (marine) . . .	79	47	31	77	66
Timber	1,329	1,415	1,683	2,255	2,648
Plywood	1,948	2,021	1,903	2,040	2,264
Veneer	68	74	84	127	165
Pyrethrum extract . . .	n.a.	n.a.	89	390	417
Other	339	418	431	360	839
Total	**31,342**	**37,237**	**37,431**	**40,262**	**52,382**

Shipping

Regular passenger and freight services operate between Australia, Papua and the Territory of New Guinea. Vessels trading between the East and Australia and the Pacific Islands call at Territory ports, and there are monthly services from continental and United Kingdom ports. Coastal and inter-island shipping services are maintained by vessels operating from the principal ports of the Territory. Shipping within the Territory is regulated by the *Shipping Ordinance* 1951–1960 and the Coastal Shipping, Ports and Harbours Regulations. Main ports of call for overseas vessels are Lae, Madang, Wewak (mainland), Rabaul (New Britain), and Kavieng (New Ireland). In 1967–68 shipping entries at Territory ports totalled 1,070, and 495,677 tons of cargo were discharged and 333,950 tons loaded. Corresponding figures for 1966–67 were 1,054, 473,087, 303,108 respectively. There are no inland waterways, and the natural river system is not generally suitable for vessels except those of small tonnage.

Other forms of transport and communication

There are no railways in New Guinea, but a road construction programme is being undertaken progressively to assist the economic development of the Territory. Road transport services operate in the main towns and on the trunk roads linking Rabaul and Kokopo; Lae, Bulolo and Wau; Kavieng and Namatanai; and on the network in the Eastern and Western Highland Districts centred on Goroka and Mount Hagen. The total mileage of roads in the Territory of New Guinea at 30 June 1968 was 5,215, of which 1,888 were adequately paved. Total motor vehicle registrations (excluding defence force vehicles) at 31 December 1967 were 12,468.

Scheduled flights provide a network of air transport throughout New Guinea, and regular air services link the Territory with Australia and neighbouring territories and also with Manila and Hong Kong. There were 377 licensed aerodromes in the whole of Papua and New Guinea at 30 June 1968, and of these 12 were the responsibility of the Department of Civil Aviation, 125 of the Administration, and 240 privately owned.

Telephone services are operated in the main centres by the Administration, and radio telephone trunk circuits link Port Moresby with Lae, Rabaul, Wewak, and Madang. The latter is connected via the SEACOM cable operated by the Overseas Telecommunications Commission with Australia and south-east Asia. Nine zone or group centres for radio telegraph communications with about 811 out-stations have been established at Lae, Rabaul, Kavieng, Lorengau, Madang, Mount Hagen, Wewak, Sohano, and Goroka.

The Australian Broadcasting Commission broadcasts from medium wave station 9RB Rabaul. The Administration Department of Information and Extension Services operates transmitters at Goroka, Kieta, Mount Hagen, Rabaul and Wewak. The stations broadcast a balanced programme of news, information, health features and entertainment designed particularly for the people in the district in which each is located.

Education and health

Education

Education in the Territory is provided by the Administration and various Mission organisations. Schools for indigenes have also been established by Local Government Councils. The *Education Ordinance* 1952–1963 enables the Administrator to establish an education advisory board, district education committees and schools for all sections of the community, and to grant financial aid for educational purposes. Teachers are recruited from Australia and overseas, and indigenous teachers are trained in the Territory by the Administration and the Missions. During the year ended 30 June 1968, 358 schools were maintained by the Administration for 56,298 children. In addition, there is a correspondence school. The total number of pupils in the various grades of mission schools, excluding exempt schools, was 100,721. To assist the educational work of the Missions the Administration provides expert advice, educational equipment and text-books. In addition, the sum of $1,528,000 was distributed among the Missions as grants-in-aid during the year ended 30 June 1968.

Health

The cases treated in hospital are mainly pneumonia, gastro-enteritis, skin diseases, malaria, accidents, diseases due to old age, and confinements. At 30 June 1968 there were 74 Administration hospitals, including 3 Hansenide colonies, 1 tuberculosis hospital, and 2 Hansenide and tuberculosis hospitals. The Missions have established an additional 73 hospitals, including 3 Hansenide colonies and 1 Hansenide and tuberculosis hospital. There were 1,005 village aid posts or medical centres (116 conducted by Missions) and 2,291 maternity and child welfare centres (1,661 provided by Missions). The Missions staff their own medical establishments but receive financial assistance and much of their medical stores and supplies from the Administration.

Finance

TRUST TERRITORY OF NEW GUINEA: REVENUE AND EXPENDITURE 1963-64 TO 1967-68

($'000)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
			REVENUE		
Customs	4,412	5,332	6,951	9,037	10,436
Licences	231	275	331	397	461
Stamp duties	114	99	191	172	269
Postal	705	963	1,111	1,353	1,661
Land revenue	195	205	335	443	384
Mining receipts	25	26	29	25	26
Fees and fines	55	74	101	131	152
Health revenue	128	141	154	183	185
Forestry	315	389	453	484	547
Agriculture	299	338	494	673	896
Direct taxation(*a*)	2,971	3,876	4,478	5,647	6,760
Public utilities	207	153	204	240	316
Miscellaneous	2,608	3,034	3,627	3,942	4,289
Territory loans(*b*)	. .	. .	3,671	4,053	5,588
Total internal revenue	*12,265*	*14,906*	*22,130*	*26,783*	*31,970*
Grant by Commonwealth of Australia	30,477	33,873	38,179	49,979	54,454
Total revenue	**42,741**	**48,780**	**60,309**	**76,762**	**86,424**

(*a*) Includes Personal Tax. (*b*) Previously deducted from expenditure.

TRUST TERRITORY OF NEW GUINEA: REVENUE AND EXPENDITURE 1963–64 TO 1967–68—*continued*

($'000)

	1963–64	*1964–65*	*1965–66*	*1966–67*	*1967–68*
EXPENDITURE					
Expenditure from revenue—					
Special appropriations	923	1,420	1,969	2,641	(*a*)1,853
Departments—					
Administrator—					
Administrator	942	606	423	767	895
Legislative and Administrator's Councils(*b*)	71	157	182	274	280
Information and Extension Services	285	332	354	457	657
Public Service Commissioner(*c*)	369	400	471	811	845
Treasury—					
Central Treasury	2,124	2,297	2,302	6,563	2,066
Taxation Branch	87	97	102	142	183
Motor Transport Branch	1,147	1,304	1,550	1,678	1,863
Stores and Supply Branch(*d*)	4,502	4,516	4,949	4,685	5,667
Government Printing Office	126	142	163	189	208
Public Health	4,702	5,079	6,119	6,890	7,839
District Administration(*e*)	2,108	2,511	2,940	4,077	4,171
Department of Agriculture, Stock and Fisheries	1,916	2,372	2,771	3,782	4,847
Education	4,911	5,945	6,902	8,337	9,618
Labour	235	286	286	406	441
Police	1,253	1,454	1,769	3,267	4,040
Law—					
Law(*f*)	417	472	660	808	976
Corrective Institutions Branch	185	221	318	600	730
Lands, Surveys and Mines	869	967	1,241	1,487	2,422
Forests	674	773	828	1,141	2,019
Posts and Telegraphs	1,537	1,782	1,943	2,455	2,748
Trade and Industry(*g*)	674	785	809	1,226	1,268
Public Works	954	2,248	2,078	2,416	3,897
Maintenance	3,727	4,428	5,157	5,893	6,778
Capital works and services(*h*)	5,919	6,107	11,422	12,534	11,352
Purchase of capital assets	2,085	2,077	2,601	3,234	(*i*)
General overheads	..	..	..	..	1,597
Other institutions(*j*)	..	..	..	..	5,746
Expenditure from revenue	*42,741*	*48,780*	*60,309*	*76,762*	*85,004*
Expenditure chargeable to Loan Fund—					
Capital works and services	2,119	3,911	..	..	..
Total expenditure	**44,861**	**52,691**	**60,309**	**76,762**	**85,004**

(*a*) Special appropriations have been reduced by taxation refunds and refunds of revenue. (*b*) Includes the Administrator's Council, which replaced the Executive Council during 1960–61, and the House of Assembly, which replaced the Legislative Council during 1963–64. (*c*) Includes the Administrative College. (*d*) Includes costs of general stores for all departments except Public Works. (*e*) Before 1964–65, Department of Native Affairs. (*f*) Up to 1963–64 the Land Titles Commission was included in the Department of Law. The two figures have been combined for 1964–65 and 1965–66. (*g*) Includes Trade and Industry, Customs and Migration, and Marine. (*h*) Additional expenditure on this item included under Expenditure chargeable to Loan Fund. (*i*) 'Capital Purchases' has been distributed among the individual departments. (*j*) Grants and loans by individual departments have been brought together under 'Other institutions'.

HEARD ISLAND AND McDONALD ISLANDS

These islands, about 2,500 miles south-west of Fremantle, were transferred from the United Kingdom to Australia as from 26 December 1947. The laws of the Australian Capital Territory were declared to be in force in the Territory of Heard Island and McDonald Islands by the *Heard and McDonald Islands Act* 1953.

In December 1947 an Australian scientific station was established on Heard Island, and meteorological investigations were conducted until the station was closed in March 1955 following the establishment of Mawson station on the Antarctic mainland. Australian expeditions have since visited the island from time to time. Heard Island is about twenty-seven miles long and thirteen miles wide. The McDonald Islands are twenty-six miles to the west of Heard Island. They are small, rocky and precipitous.

AUSTRALIAN ANTARCTIC TERRITORY

An Imperial Order in Council of 7 February 1933 placed under Australian authority all the islands and territories other than Terre Adélie situated south of 60° S. latitude and lying between 160° E. longitude and 45° E. longitude. The Order came into force with a Proclamation issued by the Governor-General on 24 August 1936 after the passage of the *Australian Antarctic Territory Acceptance Act* 1933. The boundaries of Terre Adélie were definitively fixed by a French Decree of 1 April 1938 as the islands and territories south of 60° S. latitude lying between 136° E. longitude and 142° E. longitude. The *Australian Antarctic Territory Act* 1954 declared that the laws in force in the Australian Capital Territory are, so far as they are applicable and are not inconsistent with any ordinance made under the Act, in force in the Australian Antarctic Territory.

On 13 February 1954 the Australian National Antarctic Research Expeditions (ANARE) established a station on MacRobertson Land at latitude 67° 36′ S. and longitude 62° 53′ E. The station was named Mawson in honour of the late Sir Douglas Mawson and was the first permanent Australian station to be set up on the Antarctic continent. Meteorological and other scientific research is conducted at Mawson, which is the centre for coastal and inland survey expeditions.

A second Australian scientific research station was established on the coast of Princess Elizabeth Land on 13 January 1957 at latitude 68° 35′ S. and longitude 77° 59′ E. The station was named Davis in honour of the late Captain John King Davis of Melbourne, who commanded a number of famous Antarctic ships. The station was temporarily closed down in January 1965 and reopened in February 1969. In February 1959 the Australian Government accepted from the United States Government custody of Wilkes Station, which was established by the United States on 16 January 1957 on Vincennes Bay, at latitude 66° 15′ S. and longitude 110° 33′ E. The station was named in honour of Lieut Charles Wilkes, who commanded the 1838–40 United States expedition to the area. A new station of advanced design, built about 1½ miles south of Wilkes, was opened in February 1969 and named Casey in honour of Lord Casey, who has had a long association with Antarctic Expeditions. Wilkes ceased operations early in April 1969. ANARE have also operated a station, since the 1947–48 Antarctic season, at Macquarie Island, approximately 850 miles south-east of Hobart. Macquarie Island is a dependency of the State of Tasmania.

On 1 December 1959 Australia signed the Antarctic Treaty with Argentine, Belgium, Chile, France, Japan, New Zealand, Norway, South Africa, the U.S.S.R., the United Kingdom, and the United States of America. Poland, Czechoslovakia and Denmark have subsequently acceded to the Treaty. The Treaty reserves the Antarctic area south of 60° S. latitude for peaceful purposes, provides for international co-operation in scientific investigation and research, and preserves, for the duration of the Treaty, the *status quo* with regard to territorial sovereignty, rights and claims. The Treaty entered into force on 23 June 1961. Since then the Antarctic Treaty powers have held five consultative meetings under the Treaty, the first at Canberra in July 1961, the second at Buenos Aires in July 1962, the third at Brussels in June 1964, the fourth at Santiago in 1966, and the fifth in Paris in 1968. The sixth is to be held in Tokyo in 1970.

COCOS (KEELING) ISLANDS

General description

The Cocos (Keeling) Islands, two separate atolls comprising some twenty-seven small coral islands with a total area of about 5½ square miles, are situated in the Indian Ocean in latitude 12° 5′ S. and longitude 96° 53′ E. They lie some 1,720 miles north-west of Perth and 2,290 miles almost due west of Darwin, while Johannesburg is some 3,800 miles further distant to the south-west and Colombo is 1,400 miles to the north-west of the group.

The main islands of the Territory are West Island, the largest, about six miles from north to south, on which are the aerodrome and most of the European community; Home Island, the headquarters of the Clunies-Ross Estate; Direction Island; and Horsburgh Island. North Keeling Island, which forms part of the Territory, lies about fifteen miles to the north of the groups and has no inhabitants.

Main settlements are on West Island and Home Island. The group of atolls is low-lying, flat and thickly covered by coconut palms, and surrounds a lagoon which has a harbour in the northern part but which is extremely difficult for navigation.

The climate is equable and pleasant, usually being under the influence of the south-east trade winds for about three-quarters of the year. However, the winds vary at times, and meteorological reports from the Territory are particularly valuable to those engaged in forecasting for the eastern Indian Ocean. The temperature varies between 70° and 89° F., and the average rainfall is about 67 inches. There are occasional violent storms. The estimated population at 30 June 1968 was 622 (323 males and 299 females).

History and administration

Summarised particulars of the discovery of the islands and their history up to 1946, when they became a dependency of the Colony of Singapore, are given in Year Book No. 51, page 140, and in earlier issues. On 23 November 1955 the Cocos Islands ceased to form part of the Colony of Singapore and were placed under the authority of the Commonwealth of Australia. The transfer was effected by an Order in Council made by Her Majesty Queen Elizabeth the Second under the Imperial Act entitled the Cocos Islands Act 1955 and by the *Cocos (Keeling) Islands Act* 1955 of the Commonwealth whereby the islands were declared to be accepted by the Commonwealth as a Territory under the authority of the Commonwealth, to be known as the Territory of Cocos (Keeling) Islands.

Responsibility for the administration of the Territory rests with the Minister for External Territories. The first Official Representative was appointed on 23 November 1955 to take charge of the local administration of the Territory. Under the *Official Representative Ordinance* 1955–1961 of the Territory, the Official Representative is given such powers and functions in relation to the Territory as are delegated to him by the Minister under the *Cocos (Keeling) Islands Act* 1955–1966 or are otherwise conferred on him under that Act or by or under any other law of the Territory. The laws of the Colony of Singapore which were in force in the islands immediately before the date of the transfer were, with certain exceptions, continued in force by the *Cocos (Keeling) Islands Act* 1955–1966. They may be amended or repealed by Ordinances made under the provisions of that Act which empower the Governor-General to make Ordinances for the peace, order and good government of the Territory.

Transport and communication

There is an international airport at West Island under the control of the Commonwealth Department of Civil Aviation. A three-weekly air service is provided between Perth and the Cocos Islands by Ansett and T.A.A. alternatively. Although there is no regular shipping service, vessels from Australia and Singapore call at intervals. A radio teletype link with Perth airport is maintained by the Department of Civil Aviation. Local postal and telephone services exist, and a non-commercial broadcasting station operates.

CHRISTMAS ISLAND

Christmas Island is an isolated peak situated in the Indian Ocean in latitude 10° 25′ S., longitude 105° 40′ E. It is approximately 224 miles south from Java Head at the south entrance to Sunda Strait, 815 miles from Singapore and 1,630 miles from Fremantle. Christmas Island covers an area of about fifty-two square miles. It consists of a central plateau of about 600 to 800 feet with several prominent rises up to 1,170 feet. The plateau descends to the sea in a series of steep slopes alternating with terraces, the last dropping in a cliff of 200 to 300 feet to a shore terrace, terminating in a sea cliff of 10 to 150 feet, which is continuous round the island except in a few places, the chief of which is Flying Fish Cove, where the principal settlement is located and which is also the only known anchorage.

The climate is healthy and pleasant, and the prevailing winds come from the south-east to east-south-east from May to December, but from then to April (the wet season) they occasionally shift round to between north and west. The average yearly rainfall is about 80 inches with a marked summer incidence. The porous nature of the ground prevents the formation of pools of water, but there are several good springs which maintain an adequate supply of fresh water for the small population and the installations. The mean average temperature is about 80° and does not vary greatly throughout the year.

The economy of the Territory is based almost entirely on the mining and extraction of phosphate. Because of the nature of the land there appears little prospect of establishing any other economic activity.

At 30 June 1968 the estimated population was 3,524 (2,385 males and 1,139 females).

Education

At 30 June 1967 there were two school systems on the Island—the Christmas Island school system which serves the majority of the children, and a European school which serves a small number of children. The Christmas Island school system follows the Singapore curriculum, and has a staff of 29 teachers mostly recruited from Singapore (including four locally recruited teachers-in-training receiving in-service practical instruction at the primary school), and 817 pupils (579 primary and 238 secondary). The European school follows the Western Australian primary school syllabus, with two teachers seconded from the Western Australian Department of Education, and fifty-five pupils.

History and administration

Summarised particulars of the history of Christmas Island up to its administration by the United Kingdom as a separate Crown Colony from 1 January 1958, pending transfer to Australia, are given in Year Book No. 51, page 141, and in earlier issues. On 1 October 1958 the island was transferred to the Commonwealth of Australia by the *Christmas Island Act* 1958 and is now administered as a Territory under the authority of the Commonwealth. Responsibility for the administration and government of the Territory rests with the Minister for External Territories, and day to day affairs on the island are administered by an Administrator under delegation from the Minister. The laws which were in force on the island at 30 September 1958 were continued as the laws of the Territory after its transfer to Australia.

Phosphate deposits

The only commercial activity carried out is the mining of phosphate. The British Phosphate Commissioners act as managing agents for the Christmas Island Phosphate Commission. There are three principal phosphate deposits on the islands, of which the largest is that now being worked at South Point. This field is situated on the 600 feet to 800 feet level and is approximately 12 miles from the drying and shipping plant at Flying Fish Cove. During 1967–68 approximately 1,058,228 tons of phosphate were exported to Australia and New Zealand. In addition some 69,558 tons of phosphate dust were exported to Malaysia, Singapore and Australia.

Transport and communication

Transport to and from the island is maintained by vessels operated under charter by the Christmas Island Phosphate Commission. One vessel makes regular trips between Christmas Island and Singapore, and other vessels carry phosphate to Australian ports and New Zealand.

A post office and internal telephone system are operated by the Administration. The latter comprises four automatic exchanges and three small subscriber-attended exchanges. A radio station is also operated by the British Phosphate Commissioners for messages via Perth and Singapore and for communication with ships at sea. A limited broadcasting station commenced operating during 1966–67.

CHAPTER 30

MISCELLANEOUS

This chapter comprises statistics and other descriptive information not directly related to the subjects of the preceding chapters, or which it is convenient to assemble in single sections, arranged as follows: Valuation of Australian production; Indexes of farm production; Consumption of foodstuffs and beverages; Retail trade; Interstate trade; Statistical organisation in Australia; Statistical and other official publications of Australia.

VALUATION OF AUSTRALIAN PRODUCTION

The value of production for Australia is computed in accordance with the decisions reached at the Conferences of Australian Statisticians and principally at the Conference held in 1935. The figures published in the following tables have been compiled by the Statisticians in the various States from the latest and best data available and are on a substantially uniform basis. However, marketing costs are not on a completely comparable basis between States and, in addition, accurate information is difficult to obtain for many items. In consequence, differences between States in the relationships of local to gross value should be treated with some reserve.

Attention is directed to the fact that the values shown in the tables herein refer only to the production of primary industries and factories, and exclude the building and construction industry, those industrial establishments not classified as factories, and certain agricultural and farmyard produce obtained from areas of less than one acre.

Explanation of terms used

The following is a brief explanation of the terms used.

(*a*) *Gross value of production* is the value placed on recorded production at the wholesale price realised at the principal markets. In general, the 'principal markets' are the metropolitan markets in each State. In cases where primary products are consumed at the place of production or where they become raw material for a secondary industry, these points of consumption are presumed to be the principal markets.

(*b*) *Local value* (i.e. gross production valued at the place of production) is ascertained by deducting marketing costs from the gross value. Marketing costs include freight, cost of containers, commission, and other charges incidental thereto.

(*c*) *Net value of production* represents local value less value of materials used in the process of production. Materials used in the process of production include seed, power, power kerosene, petrol and other oils, fodder consumed by farm stock, manures, dips, sprays, and other costs. No deductions have been made for depreciation or certain maintenance costs, as particulars are not available for all States. The net value of production is the only satisfactory measure to use when comparing or combining the value of primary industries with those of other industries.

For the years shown in the following tables, no allowance for power, power kerosene, petrol, and other oils has been made in New South Wales. In the case of the mining and quarrying industry, however, this allowance has been made in all States. Marketing costs for mining and quarrying and costs of materials used in the process of production in respect of bee-farming, trapping, forestry, and fisheries are not available for all States. Local values have been used for these industries, with consequent understatement in gross value for the mining and quarrying industry and overstatement in net value for the other industries. Because of revisions, some figures differ from corresponding figures in earlier chapters of this Year Book.

Value of production, Australia

GROSS, LOCAL AND NET VALUE OF PRODUCTION OF PRIMARY INDUSTRIES AND FACTORIES: AUSTRALIA, 1967–68

($'000)

Industry	*Gross production valued at principal markets*	*Local value—gross production valued at place of production*	*Net value of production (without deduction of depreciation or maintenance)*
Agriculture	1,269,269	1,085,813	899,877
Pastoral	1,395,231	1,277,315	1,044,436
Dairying	504,050	475,438	371,306
Poultry	172,488	151,704	57,121
Bee-farming	4,627	3,806	(*a*)3,806
Total, rural . . .	*3,345,666*	*2,994,073*	*2,376,544*
Trapping	12,051	10,547	(*a*)10,547
Forestry	120,725	111,388	(*a*)111,388
Fisheries	58,956	54,308	(*a*)54,308
Mining and quarrying(*b*) . .	(*a*)703,834	703,834	568,065
Total, non-rural . . .	*895,565*	*880,076*	*744,308*
Total, all primary . .	*4,241,230*	*3,874,151*	*3,120,851*
Factories	(*c*)7,430,853	(*c*)7,430,853	7,430,853
Grand total	**11,672,280**	**11,305,153**	**10,551,856**

(*a*) Local value. (*b*) Year ended 31 December 1967. (*c*) Net value.

Net value of production

NET(*a*) VALUE OF PRODUCTION OF PRIMARY INDUSTRIES AND FACTORIES: STATES AND TERRITORIES, 1967–68

($'000)

Industry	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Agriculture . .	227,380	169,501	219,431	90,903	162,501	29,270	653	238	899,877
Pastoral . . .	330,338	254,187	215,834	98,722	119,231	12,469	12,175	1,480	1,044,436
Dairying . . .	124,867	140,097	53,623	22,169	11,820	18,244	110	376	371,306
Poultry . . .	16,499	27,705	5,346	1,938	2,492	2,653	257	231	57,121
Bee-farming(*b*) . .	1,764	782	351	568	219	103	. .	19	3,806
Total, rural .	*700,847*	*592,272*	*494,585*	*214,300*	*296,262*	*62,739*	*13,195*	*2,344*	*2,376,544*
Trapping(*b*) . .	3,863	3,409	1,028	853	900	442	52	. .	10,547
Forestry(*b*). . .	34,209	27,448	12,948	8,100	13,274	14,766	278	365	111,388
Fisheries(*b*) . .	10,212	5,322	6,896	6,162	21,762	3,847	107	. .	54,308
Mining and quarrying(*c*)	222,817	47,382	110,558	34,595	110,267	25,197	16,415	834	568,065
Total, non-rural.	*271,100*	*83,561*	*131,429*	*49,710*	*146,203*	*44,253*	*16,853*	*1,199*	*744,308*
Total, all primary . .	*971,946*	*675,833*	*626,014*	*264,010*	*442,465*	*106,992*	*30,048*	*3,543*	*3,120,851*
Factories . . .	3,130,982	2,394,801	657,853	631,890	388,257	198,019	9,680	19,372	7,430,853
Grand total .	**4,103,068**	**3,070,634**	**1,283,879**	**895,900**	**830,722**	**305,011**	**39,728**	**22,915**	**10,551,856**

(*a*) *See* text on page 1195. (*b*) Local value. (*c*) Year ended 31 December 1967.

NET(*a*) VALUE OF PRODUCTION OF PRIMARY INDUSTRIES AND FACTORIES PER HEAD OF POPULATION, STATES, 1967–68

($)

Industry	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*(*b*)
Agriculture	52.30	51.33	127.74	81.29	182.07	77.16	75.45
Pastoral	75.99	76.97	125.64	88.29	133.59	32.87	87.57
Dairying	28.72	42.42	31.22	19.83	13.24	48.09	31.13
Poultry	3.80	8.39	3.11	1.73	2.79	6.99	4.79
Bee-farming(*c*) . .	0.41	0.24	0.20	0.51	0.25	0.27	0.32
Total, rural . .	*161.22*	*179.35*	*287.91*	*191.64*	*331.93*	*165.38*	*199.26*
Trapping(*c*) . . .	0.89	1.03	0.60	0.76	1.01	1.17	0.88
Forestry(*c*) . . .	7.87	8.31	7.54	7.24	14.87	38.92	9.34
Fisheries(*c*) . . .	2.35	1.61	4.01	5.51	24.38	10.14	4.55
Mining and quarrying(*d*) .	51.26	14.35	64.38	30.94	123.54	66.43	47.63
Total, non-rural .	*62.36*	*25.30*	*76.51*	*44.46*	*163.81*	*116.66*	*62.41*
Total, all primary .	*223.58*	*204.65*	*364.42*	*236.10*	*495.74*	*282.04*	*261.67*
Factories . . .	720.23	725.17	382.96	565.10	435.02	521.93	623.05
Grand total . .	**943.84**	**929.82**	**747.40**	**801.20**	**930.78**	**803.93**	**884.73**

(*a*) *See* text on page 1195. (*b*) Includes Northern Territory and Australian Capital Territory. (*c*) Local value. (*d*) Year ended 31 December 1967.

NET(*a*) VALUE OF PRODUCTION OF PRIMARY INDUSTRIES AND FACTORIES: AUSTRALIA, 1963–64 TO 1967–68

($'000)

Industry	*1963–64*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Agriculture . . .	917,388	975,164	857,913	1,209,003	899,877
Pastoral . . .	1,340,578	1,221,300	1,188,536	1,181,848	1,044,436
Dairying . . .	330,218	360,737	349,853	371,939	371,306
Poultry	61,508	50,916	62,636	69,908	57,121
Bee-farming(*b*) . .	5,144	4,118	3,515	3,278	3,806
Total, rural . .	*2,654,836*	*2,612,235*	*2,462,450*	*2,835,976*	*2,376,544*
Trapping(*b*) . . .	13,364	13,060	13,824	11,948	10,547
Forestry(*b*) . . .	99,062	107,421	111,039	108,946	111,388
Fisheries(*b*) . . .	31,684	38,685	41,725	44,574	54,308
Mining and quarrying(*c*) .	327,664	400,119	443,853	515,534	568,065
Total, non-rural .	*471,775*	*559,283*	*610,443*	*681,004*	*744,308*
Total, all primary .	*3,126,611*	*3,171,519*	*3,072,897*	*3,516,979*	*3,120,851*
Factories . . .	(*d*)5,270,004	5,896,754	6,251,861	6,877,001	7,430,853
Grand total . .	**8,396,615**	**9,068,273**	**9,324,758**	**10,393,980**	**10,551,856**

(*a*) *See* text on page 1195. (*b*) Local value. (*c*) Year ended 31 December of first year shown. (*d*) Excludes Northern Territory and Australian Capital Territory.

INDEXES OF FARM PRODUCTION

In the first two tables in this section indexes of price and quantum (i.e. value at constant prices) of production are given for the following industrial groups: Agriculture, Pastoral, Dairying, poultry and bee-farming, and All farming combined (including separate indexes for Wool and Products other than wool). In the third table indexes of quantum (i.e. value at constant prices) of production, exports and consumption of farm products for food use are shown.

Farm production price indexes

The farm production price indexes shown in the following table relate to average 'prices' of agricultural, pastoral, dairying, poultry and bee-farming products realised at the principal markets of Australia. The 'price' data used are average unit values for the total quantities of the relevant commodities produced or marketed in each year, and the index numbers therefore measure both the effects of changes in prices (as such) and of variations in the quality, type, usage, etc. of products marketed. The index numbers for any year relate to the average values of products produced or marketed in that year irrespective of the periods in which payment is received by producers.

The indexes have been calculated by the fixed-base weighted aggregative method. 'Prices' for each commodity in any year are obtained by dividing gross value of production by the quantity produced in that year. In the original published series of Production Price Index Numbers the average quantities of the relevant commodities *produced* in the period 1923–24 to 1927–28 were used as fixed weights. This series, re-computed to the base average 1936–37 to 1938–39 = 100, was published in earlier issues of the Year Book (*see* No. 43, page 1050). For 1936–37 and later years the original series was replaced in December 1952 by a revised series in which average quantities of each product *marketed* during the period 1946–47 to 1950–51 were used as fixed weights. In the revised series the regimen was extended and modified to include farm products (as defined by Australian Statisticians) in all cases. Certain other refinements were also incorporated in the revised indexes, the principal of which was the omission from the weights used for the All farming index of quantities of crops marketed for livestock feeding in Australia.

FARM PRODUCTION: INDEXES OF PRICES AT PRINCIPAL MARKETS, AUSTRALIA 1953–54 TO 1967–68

(*Base: Average of 3 years ended June 1939 = 100*)

Year	*Agri-culture*	*Pastoral*	*Dairying, poultry and bee-farming*	*All farming*	*Wool (shorn and dead)*	*Products other than wool*
1953–54 . .	324	534	395	429	621	365
1954–55 . .	316	489	371	401	540	355
1955–56 . .	330	451	392	397	468	373
1956–57 . .	336	536	386	432	607	374
1957–58 . .	336	435	382	388	473	359
1958–59 . .	322	396	386	369	370	369
1959–60 . .	329	464	402	403	440	391
1960–61 . .	349	443	402	401	397	403
1961–62 . .	348	421	373	385	412	376
1962–63 . .	334	450	388	396	449	378
1963–64 . .	351	511	402	431	531	398
1964–65 . .	351	460	423	415	437	408
1965–66 . .	354	501	422	431	458	423
1966–67 . .	350	496	418	427	433	425
1967–68 . .	371	457	413	417	382	429

Indexes of quantum (i.e. value at constant prices) of farm production

The indexes shown in the following table relate to gross output of farm products valued at constant prices. They have been calculated by revaluing quantities of each farm product included in the indexes at the average unit gross value of each product for the base years.

In the original published series the period 1923–24 to 1927–28 was adopted as the base for revaluing each farm product. This series, re-computed to the base: average 1936–37 to 1938–39 = 100, was published in earlier issues of the Year Book (*see* No. 43 page 1051). For 1936–37 and later years the original series was replaced in December 1952 by a revised series in which average unit values for the period 1936–37 to 1938–39 were used. The regimen used for the revised series was extended and modified to include farm products (as defined by Australian Statisticians) in all cases. Certain other refinements were incorporated in the revised indexes, the principal of which was the omission, in calculating the All farming index, of quantities of crops fed to livestock in Australia.

INDEXES OF QUANTUM(*a*) OF FARM PRODUCTION: AUSTRALIA
1953-54 TO 1967-68

(*Base: Average of 3 years ended June 1939 = 100*)

Year	*Agri-culture*	*Pastoral*	*Dairying, poultry and bee-farming*	*All farming*	*Wool (shorn and dead)*	*Products other than wool*
1953–54	129	123	107	122	128	120
1954–55	120	127	117	123	132	120
1955–56	134	136	120	131	146	127
1956–57	120	148	117	131	164	121
1957–58	109	142	114	124	148	116
1958–59	165	159	119	149	164	145
1959–60	140	163	123	144	172	136
1960–61	177	152	120	152	165	148
1961–62	163	160	128	155	174	150
1962–63	191	163	129	166	170	165
1963–64	196	172	131	174	183	171
1964–65	218	172	136	181	183	180
1965–66	184	163	138	166	169	165
1966–67	265	167	145	199	180	205
1967–68	189	174	141	175	180	173

(*a*) Indexes of value at constant prices, i.e. quantities revalued at average unit values of the base years (*see* text preceding table).

Farm products for food use: indexes of quantum (i.e. value at constant prices) of production, exports and consumption

The indexes shown in the following table have been calculated by revaluing quantities of each farm product included in the indexes at the average unit gross value of each product for the years 1936–37 to 1938–39. The items included comprise products in the form in which they are sold from farms in all cases except livestock sold for slaughter for meat, which are included in terms of dressed carcass weight of meat. Quantity data relating to exports include exports of processed food in terms of farm product equivalent. The indexes of production relate basically to gross output of farm products for food use, including crops exported for stock-feeding overseas.

FARM PRODUCTS FOR FOOD USE: INDEXES OF QUANTUM(*a*) OF PRODUCTION, EXPORTS AND CONSUMPTION AUSTRALIA, 1953-54 TO 1967-68

(*Base: average of 3 years ended June 1939 = 100*)

Year	*Production*		*Exports*		*Consumption in Australia*	
	Total	*Per head of total population*	*Total*	*Per head of total population*	*Total*	*Per head of total population*
1953–54	122	94	102	79	124	96
1954–55	121	91	117	89	127	96
1955–56	129	95	131	97	131	97
1956–57	123	88	118	85	136	98
1957–58	115	81	90	64	139	98
1958–59	146	101	137	94	142	98
1959–60	138	93	132	89	145	98
1960–61	148	98	170	112	143	95
1961–62	154	99	161	104	150	97
1962–63	168	107	187	119	154	98
1963–64	175	109	207	129	159	99
1964–65	185	112	219	134	163	99
1965–66	167	100	181	108	162	97
1966–67	197	115	243	143	167	98
1967–68	178	102	194	112	171	99

(*a*) Indexes of value at constant prices, i.e. quantities revalued at average unit values for the base years (*see* text preceding table).

CONSUMPTION OF FOODSTUFFS AND BEVERAGES

Quantities consumed

The estimates of total consumption and consumption per head of population in Australia in the two tables which follow have been compiled by deducting net exports from the sum of production and imports and allowing for recorded movements in stocks of the respective commodities. While the estimates may be generally accepted as being reasonably accurate, there are some deficiencies to which attention should be directed. These relate chiefly to the quantities of fish, rabbits and hares and the quantities of certain oils and fats entering consumption. In addition, little information is available on the quantities of vegetables, fruit, eggs, etc. which householders produce for their own requirements and the extent of wastage occurring in the marketing of foodstuffs. In all these cases careful estimates have been compiled from the best available data, and the quantities shown as entering consumption in Australia have been adjusted to allow for these circumstances. The absence of particulars for stocks of certain commodities has resulted in some inaccuracies in the estimates of annual consumption. Consumption of foodstuffs is measured in general at ‘producer’ level. As a result, no allowance is made for wastage before the foodstuffs are consumed. In recent years wastage of foodstuffs has possibly been less than previously because of more efficient distribution and storage methods. Furthermore, it is likely that the quantities of foodstuffs shown in the following pages as available for consumption have been supplemented by production by householders for their own requirements. In most cases broad estimates of non-commercial (householders’) production have been made. Except in a few special cases, no adjustment has been made for changes in stocks held by wholesalers and retailers. Where no allowance is made it is considered unlikely that these stocks would make any appreciable difference to consumption estimates. It is felt that the foregoing deficiencies do not seriously impair the accuracy of the estimates compiled.

The estimates of consumption per head of population shown in the second of the following tables have been derived by dividing the total apparent consumption of each commodity or commodity group in a given year by the mean population of Australia in the same period.

More detailed information on the consumption of foodstuffs and beverages is contained in the statistical bulletin: *Report on Food Production and the Apparent Consumption of Foodstuffs and Nutrients*, issued by this Bureau.

The following tables show the average annual consumption during the three-year periods ended 1938–39, 1948–49 and 1958–59, together with the data for each of the years 1965–66, 1966–67 and 1967–68. Because of revisions, figures for some items in the following tables differ from corresponding figures in earlier chapters of this Year Book.

ESTIMATED QUANTITY OF FOODSTUFFS AND BEVERAGES AVAILABLE FOR CONSUMPTION ANNUALLY: AUSTRALIA, 1936-37 TO 1967-68

Commodity		*Average three years ended—*					
		1938–39	*1948–49*	*1958–59*	*1965–66*	*1966–67*	*1967–68p*
Milk and milk products—							
Fluid whole milk	mil. gal	161	233	276	330	330	338
Fresh cream	'000 tons	19.7	5.1	8.7	10.3	10.5	10.6
Condensed, concentrated and evaporated milk—							
Full cream—							
Sweetened	,,	13.2	11.9	11.3	13.6	11.4	14.9
Unsweetened	,,		13.6	27.6	(*a*)40.5	(*a*)40.7	(*a*)39.0
Skim	,,	n.a.	n.a.	5.6	9.8	11.1	8.5
Powdered milk—							
Full cream	,,	8.1	11.0	11.0	10.2	8.9	10.6
Skim	,,	. .	1.9	10.7	(*b*)39.0	(*b*)45.8	(*b*)51.1
Infants' and invalids' foods	,,	3.0	4.3	9.4	16.3	19.6	19.9
Cheese	,,	13.4	18.8	25.0	40.7	40.7	40.0
Total milk and milk products (in terms of milk solids)	,,	*120.5*	*167.4*	*212.4*	*286.6*	*292.1*	*303.1*
Meat—							
Beef and veal (carcass weight)	,,	430.3	372.7	538.4	475.6	446.1	478.0
Mutton	,,	184.1	154.0	221.6	236.0	215.8	221.9
Lamb	,,	46.0	86.1	127.7	189.2	222.1	230.0
Pigmeat	,,	26.2	24.3	43.6	68.4	70.2	78.2
Offal	,,	25.7	30.3	49.7	58.9	57.7	60.7
Canned meat (canned weight)	,,	6.5	9.0	17.9	23.1	26.3	24.7
Bacon and ham (cured carcass weight)	,,	31.5	39.9	30.5	38.8	42.1	41.1
Total meat (in terms of carcass equivalent weight)	,,	*769.9*	*736.9*	*1,054.1*	*1,111.2*	*1,099.4*	*1,157.5*
Poultry, fish, rabbits and hares—							
Poultry, rabbits and hares (dressed weight)	,,	n.a.	n.a.	n.a.	80.7	96.0	109.5
Fish (edible weight)—							
Fresh—							
Australian origin	,,	19.7	19.4	13.8	17.1	16.3	16.2
Imported	,,			9.0	19.4	17.4	18.5
Cured (including smoked and salted)	,,			3.8	4.8	3.4	4.1
Crustaceans and molluscs	,,	2.1	2.1	3.8	7.7	9.3	11.2
Canned—Australian origin	,,	12.4	10.5	3.3	5.6	4.5	3.5
Imported	,,			7.4	12.4	12.5	11.9
Total poultry, fish, rabbits and hares (edible weight)	,,	*n.a.*	*n.a.*	*n.a.*	*113.6*	*118.8*	*128.6*
Eggs and egg products (in terms of eggs in shell)—							
Eggs in shell	,,	78.7	86.5	92.1	(*c*)131.6	(*c*)134.6	(*c*)137.1
Egg pulp	,,	2.9	8.6	5.7	(*c*)8.8	(*c*)8.1	(*c*)10.7
Egg powder	,,	. .	. .	0.2	(*c*)0.6	(*c*)0.9	(*c*)0.8
Total eggs and egg products	,,	*81.6*	*95.1*	*98.0*	(*c*)*141.0*	(*c*)*143.6*	(*c*)*148.6*
	mil. doz	*139.3*	*162.3*	*167.3*	*210.5*	*214.5*	*221.9*

For footnotes *see* next page.

ESTIMATED QUANTITY OF FOODSTUFFS AND BEVERAGES AVAILABLE FOR CONSUMPTION ANNUALLY: AUSTRALIA, 1936–37 TO 1967–68—*continued*

Commodity		*Average three years ended—*					
		1938–39	*1948–49*	*1958–59*	*1965–66*	*1966–67*	*1967–68p*
Fats and oils—							
Butter	'000 tons	101.4	84.7	118.4	111.6	114.1	115.2
Margarine—							
Table	„	2.8	3.0	n.a.	24.0	21.6	15.4
Other	„	12.2	18.7	21.2	30.0	33.9	39.6
Vegetable oils and other fats	„	19.6	18.0	19.6	23.1	23.5	24.0
Total fats and oils (fat content)	„	*115.5*	*105.5*	*n.a.*	*161.6*	*165.3*	*166.2*
Sugar and syrups—							
Refined sugar—							
As sugar	'000 tons	216.5	234.6	259.0	256.4	241.8	254.3
In manufactured products	„	110.1	174.2	226.1	311.8	321.4	313.6
Honey, glucose and syrups (sugar content)	„	17.3	19.1	22.8	35.5	36.9	40.1
Total sugar and syrups (sugar content)	„	*343.9*	*427.9*	*507.9*	*603.7*	*600.1*	*608.0*
Pulse and nuts—							
Dried pulse	„	4.5	7.4	11.1	15.9	19.5	13.1
Peanuts (weight without shell)	„	2.8	8.7	7.2	12.2	13.8	15.5
Edible tree nuts (weight without shell)	„	2.6	4.4	6.7	10.0	10.6	10.8
Cocoa (raw beans)	„	6.3	11.6	12.1	18.3	17.8	19.0
Total pulse and nuts	„	*16.2*	*32.1*	*37.1*	*56.3*	*61.6*	*58.4*
Fruit—							
Citrus fruit(*d*)	„	97.8	127.2	153.8	214.5	254.8	246.7
Other fresh fruit	„	288.2	297.5	341.4	452.5	417.2	455.8
Jams	„	35.1	42.5	37.5	38.8	38.2	39.3
Dried fruit	„	24.8	30.0	26.4	24.2	29.4	27.0
Canned fruit	„	31.9	37.3	59.4	105.3	107.0	127.6
Total fruit (fresh fruit equivalent)	„	*532.3*	*607.9*	*691.4*	*912.2*	*948.4*	*993.8*
Vegetables(*d*)—							
Leafy and green vegetables	„	n.a.	154.0	172.1	227.5	252.7	245.9
Tomatoes	„	(*e*)48.0	86.3	124.4	158.9	167.6	163.2
Root and bulb vegetables	„	n.a.	143.7	152.8	180.5	204.1	183.1
Potatoes—							
White	„	318.5	424.3	495.4	573.7	574.7	591.6
Sweet	„	7.4	5.3	6.1	7.2	7.3	7.5
Other vegetables	„	n.a.	162.8	178.4	193.7	206.1	208.5
Total vegetables	„	*n.a.*	*976.4*	*1,129.2*	*1,341.3*	*1,412.0*	*1,399.8*
Grain products—							
Flour (including wheatmeal for baking and sharps)	„	574.0	689.7	789.1	887.8	900.9	900.5
Breakfast foods	„	32.5	45.8	58.8	78.3	74.1	80.2
Rice (milled)	„	12.2	3.0	n.a.	25.2	27.5	28.2
Tapioca, sago, etc.	„	3.7	2.3	1.4	0.9	1.0	0.9
Pearl barley	„	3.0	1.7	2.0	1.4	1.7	1.9
Total grain products	„	(*f*)*629.7*	(*f*)*747.4*	*n.a.*	*993.6*	*1,005.2*	*1,011.6*
Beverages—							
Tea	„	21.1	22.1	26.1	28.4	27.4	27.1
Coffee(*g*)	„	2.0	3.4	5.9	11.3	13.3	13.9
Beer	mil. gal	80.1	129.5	221.0	278.5	291.1	306.2
Wine	„	4.2	9.8	11.1	15.3	17.5	19.8
Spirits	mil. pf gal	1.5	2.4	2.8	3.7	3.7	4.3

(*a*) Includes ice cream mixes. (*b*) Includes buttermilk and mixed skim and buttermilk. (*c*) Not comparable with data prior to 1960–61, in which year the average weight of an egg was altered in calculations from 1.75 oz to 2 oz. (*d*) Includes fresh equivalent of manufactured products. (*e*) Probably understated owing to lack of complete data. (*f*) Includes an allowance for edible starch (cornflour). (*g*) Coffee and coffee products in terms of processed whole or ground pure coffee.

ESTIMATED QUANTITY OF FOODSTUFFS AND BEVERAGES AVAILABLE FOR CONSUMPTION ANNUALLY PER HEAD OF POPULATION: AUSTRALIA, 1936-37 TO 1967-68

Commodity		*Average three years ended—*					
		1938–39	*1948–49*	*1958–59*	*1965–66*	*1966–67*	*1967–68p*
Milk and milk products—							
Fluid whole milk	gallons	23.4	30.5	28.3	28.7	28.2	28.3
Fresh cream	lb	6.1	1.5	2.0	2.0	2.0	2.0
Condensed, concentrated and evaporated milk—							
Full cream—							
Sweetened	,,	4.3	3.5	2.6	2.6	2.2	2.8
Unsweetened	,,		4.0	6.4	(*a*)7.9	(*a*)7.8	(*a*)7.3
Skim	,,	n.a.	n.a.	1.3	1.9	2.1	1.6
Powdered milk—							
Full cream	,,	2.6	3.2	2.5	2.0	1.7	2.0
Skim	,,	. .	0.6	2.5	(*b*)7.6	(*b*)8.8	(*b*)9.6
Infants' and invalids' foods	,,	1.0	1.3	2.2	3.2	3.7	3.7
Cheese	,,	4.4	5.5	5.7	7.9	7.8	7.5
Total milk and milk products (in terms of milk solids)	,,	*39.3*	*49.1*	*48.7*	*55.8*	*55.9*	*56.9*
Meat—							
Beef and veal (carcass weight)	,,	140.3	109.1	123.8	92.6	85.3	89.8
Mutton	,,	60.0	45.1	51.0	46.0	41.3	41.7
Lamb	,,	15.0	25.2	29.3	36.8	42.5	43.2
Pigmeat	,,	8.5	7.1	10.1	13.3	13.4	14.7
Offal	,,	8.4	8.9	11.4	11.5	11.0	11.4
Canned meat (canned weight)	,,	2.1	2.6	4.1	4.5	5.0	4.6
Bacon and ham (cured carcass weight)	,,	10.2	11.7	7.1	7.6	8.1	7.7
Total meat (in terms of carcass equivalent weight)	,,	*250.9*	*215.7*	*242.4*	*216.4*	*210.3*	*217.4*
Poultry, fish, rabbits and hares—							
Poultry, rabbits and hares (dressed weight)	,,	n.a.	n.a.	n.a.	15.7	18.4	20.6
Fish (edible weight)—							
Fresh—							
Australian origin	,,	6.4	5.7	3.2	3.3	3.1	3.0
Imported	,,			2.1	3.8	3.3	3.5
Cured (including smoked and salted)	,,			0.9	0.9	0.6	0.8
Crustaceans and molluscs	,,	0.7	0.6	0.9	1.5	1.8	2.1
Canned—							
Australian origin	,,	4.1	3.0	0.8	1.1	0.9	0.7
Imported	,,			1.7	2.4	2.4	2.2
Total poultry, fish, rabbits and hares (edible weight)	,,	*n.a.*	*n.a.*	*n.a.*	*22.1*	*22.7*	*24.2*
Eggs and egg products (in terms of eggs in shell)—							
Eggs in shell	,,	25.7	25.4	21.2	(*c*)25.6	(*c*)25.7	(*c*)25.7
Egg pulp	,,	0.9	2.5	1.3	(*c*)1.7	(*c*)1.6	(*c*)2.0
Egg powder	,,	. .	. .	. .	(*c*)0.1	(*c*)0.2	(*c*)0.1
Total eggs and egg products	,,	*26.6*	*27.9*	*22.5*	*(c)27.5*	*(c)27.5*	*(c)27.9*
	No.	*243*	*255*	*206*	*220*	*220*	*223*
Fats and oils—							
Butter	lb	32.9	24.8	27.2	21.7	21.8	21.6
Margarine—							
Table	,,	0.9	0.9	n.a.	4.6	4.1	2.9
Other	,,	4.0	5.2	4.9	5.8	6.5	7.4
Vegetable oils and other fats	,,	6.4	5.3	4.5	4.5	4.5	4.5
Total fats and oils (fat content)	,,	*37.6*	*30.9*	*n.a.*	*31.5*	*31.6*	*31.2*
Sugar and syrups—							
Refined sugar—							
As sugar	,,	70.6	68.7	59.6	49.9	46.3	47.8
In manufactured products	,,	35.9	51.0	52.0	60.7	61.5	58.9
Honey, glucose and syrups (sugar content)	,,	5.5	5.6	5.2	6.9	7.1	7.5
Total sugar and syrups (sugar content)	,,	*112.0*	*125.3*	*116.8*	*117.6*	*114.8*	*114.2*
Pulse and nuts—							
Dried pulse	lb	1.5	2.1	2.6	3.1	3.7	2.5
Peanuts (weight without shell)	,,	0.9	2.5	1.7	2.4	2.6	2.9
Edible tree nuts (weight without shell)	,,	0.8	1.3	1.5	1.9	2.0	2.0
Cocoa (raw beans)	,,	2.1	3.4	2.8	3.6	3.4	3.6
Total pulse and nuts	,,	*5.3*	*9.3*	*8.6*	*11.0*	*11.8*	*11.0*

For footnotes *see* next page.

ESTIMATED QUANTITY OF FOODSTUFFS AND BEVERAGES AVAILABLE FOR CONSUMPTION ANNUALLY PER HEAD OF POPULATION: AUSTRALIA

1936–37 TO 1967–68—*continued*

Commodity		*Average three years ended—*					
		1938–39	*1948–49*	*1958–59*	*1965–66*	*1966–67*	*1967–68p*
Fruit—							
Citrus fruit(*d*)	lb	31.9	37.2	35.4	41.8	48.7	46.3
Other fresh fruit	,,	94.0	87.1	78.4	88.1	79.8	85.6
Jams	,,	11.4	12.4	8.6	7.6	7.3	7.4
Dried fruit	,,	8.1	8.7	6.0	4.7	5.6	5.1
Canned fruit	,,	10.4	11.0	13.6	20.5	20.5	24.0
Total fruit (fresh fruit equivalent)	,,	*173.6*	*178.0*	*157.6*	*177.7*	*181.4*	*186.7*
Vegetables(*d*)—							
Leafy and green vegetables	,,	n.a.	45.1	39.5	44.3	48.3	46.2
Tomatoes	,,	(*e*)15.7	25.3	28.6	30.9	32.1	30.7
Root and bulb vegetables	,,	n.a.	42.1	35.1	35.2	39.0	34.4
Potatoes—							
White	,,	103.8	124.2	113.9	111.7	109.9	111.1
Sweet	,,	2.4	1.5	1.4	1.4	1.4	1.4
Other vegetables	,,	n.a.	47.7	41.0	37.7	39.4	39.2
Total vegetables	,,	*n.a.*	*285.9*	*259.5*	*261.3*	*270.1*	*262.9*
Grain products—							
Flour (including wheatmeal for baking and sharps)	,,	187.1	201.9	181.5	172.9	172.4	169.1
Breakfast foods	,,	10.6	13.4	13.5	15.4	14.2	15.1
Rice (milled)	,,	4.0	0.9	n.a.	4.9	5.3	5.3
Tapioca, sago, etc.	,,	1.2	0.7	0.3	0.2	0.2	0.2
Pearl barley	,,	1.0	0.5	0.4	0.3	0.3	0.3
Total grain products	,,	*(f)205.3*	*(f)218.8*	*n.a.*	*193.5*	*192.3*	*190.0*
Beverages—							
Tea	,,	6.9	6.5	6.0	5.5	5.2	5.1
Coffee(*g*)	,,	0.6	1.0	1.3	2.2	2.5	2.6
Beer	gallons	11.7	16.9	22.7	24.2	24.9	25.7
Wine	,,	0.6	1.3	1.1	1.3	1.5	1.7
Spirits	pf gal	0.2	0.3	0.3	0.3	0.3	0.4

(*a*) Includes ice cream mixes. (*b*) Includes buttermilk and mixed skim and buttermilk. (*c*) Not comparable with data prior to 1960–61, in which year the average weight of an egg was altered in calculations from 1.75 oz to 2 oz. (*d*) Includes fresh equivalent of manufactured products. (*e*) Probably understated owing to lack of complete data. (*f*) Includes an allowance for edible starch (cornflour). (*g*) Coffee and coffee products in terms of processed whole or ground pure coffee.

Level of nutrient intake

The next table shows details of the estimated supplies of nutrients available for consumption in Australia during the three years 1965–66 to 1967–68 in comparison with the annual averages for the three-year periods ended 1938–39, 1948–49 and 1958–59. The table has been compiled by the Nutrition Section of the Commonwealth Department of Health and is based on the estimates of the quantity of foodstuffs available for consumption per head of population shown in the preceding table.

ESTIMATED SUPPLY OF NUTRIENTS AVAILABLE FOR CONSUMPTION AUSTRALIA, 1936-37 TO 1967-68

(Per head per day)

Nutrient		*Average three years ended—*					
		1938–39	*1948–49*	*1958–59*	*1965–66*	*1966–67*	*1967–68p*
Kilocalories		3,117	3,245	3,297	3,274	3,304	3,261
Protein—							
Animal	g	58.7	57.4	59.6	61.6	61.2	62.9
Vegetable	,,	30.9	35.3	32.3	32.5	33.3	31.5
Total	,,	89.6	92.7	91.9	94.1	94.5	94.4
Fat	,,	133.5	121.7	131.7	127.7	127.2	128.6
Carbohydrate	,,	377.4	424.8	416.7	420.4	425.4	435.1
Calcium	mg	642	785	817	885	971	979
Iron	,,	15.4	15.1	14.0	14.2	13.9	14.1
Vitamin A	I.U.	4,905	4,630	4,568	4,368	4,522	4,309
Ascorbic acid	mg	86	96	89	94	97	96
Thiamine	,,	1.4	1.5	1.3	1.3	1.3	1.3
Riboflavin	,,	1.7	1.9	1.8	1.9	2.1	2.3
Niacin	,,	18.7	17.6	18.6	18.8	19.1	19.2

RETAIL TRADE

The statistics in this section relate to retail establishments throughout Australia and the value of retail sales of goods by these establishments.

Information of this nature was first collected in respect of the year ended 30 June 1948 by a full census of all retail establishments. As this was the first census of its type in Australia, its scope and the data sought were the minima consistent with the objective of securing a record of the number of such establishments, their type, their geographical distribution, their aggregate sales of goods, and a simple commodity dissection, together with a record of the value of certain services provided. This census was followed by a second census of all retail establishments trading during the year ended 30 June 1949.

Further censuses were taken in respect of the years ended 30 June 1953 and 1957. In these censuses retailers were asked to furnish more detailed information concerning the dissection of their turnover into commodity groups, and questions were asked about stocks of goods on hand, the number of persons engaged in retail activities, and credit sales. In addition, the 1956–57 census included questions relating to purchases, customers' indebtedness and type of organisation.

The most recent census for which results are available was taken in respect of the year ended 30 June 1962, and results have been published for all States and Australia. With the exception of some modifications to the scope of collection (*see* hereunder), the 1961–62 census followed the same general principles adopted for the 1956–57 census.

In general terms the census covered the retail trading activities of establishments which normally sell goods by retail to the general public from fixed premises (i.e. shops, rooms, kiosks, and yards). Retail activities of wholesalers and manufacturers were included if they sold regularly by retail to the general public. Sales by itinerant vendors (e.g. hawkers, street sellers, etc.) and sales from casual stalls or booths were excluded. Organisations such as clubs and societies making sales to their own members were excluded from the main census collection, but a supplementary collection was made, covering sales by *licensed* clubs.

In general, establishments with retail sales of goods amounting to less than $1,000 in the census year are not included in the census tabulations. However, some 'service' establishments with retail sales of less than $1,000, but with takings of $1,000 or more from repairs, meals or hairdressing were included in the main census collection, and details of these establishments are included in tables in Year Book No. 50, page 1244. The types of establishments in this category are boot repairers, repair-only garages, cafes and restaurants, and hairdressers.

The design of the census is such that particulars of retail sales relate principally to sales to the final consumer of new and second-hand goods generally used for household and personal purposes. For this reason, sales of building materials, farm and industrial machinery and equipment, earth-moving equipment, etc., have been excluded from the censuses. For the same reason, and also because of difficulties in obtaining reliable and complete reporting, sales of builders' hardware and supplies, business machines and equipment, grain, feed, fertiliser and agricultural supplies, and tractors were excluded from the 1961–62 census. Retail sales of motor vehicles, parts, etc., have been included, whether for industrial, commercial, farm, or private use.

During the period between censuses variations in the value of retail sales have been measured by means of quarterly sample surveys. Annual totals derived from these surveys, adjusted to a basis comparable in scope with the 1961–62 census, and some of the results of the 1961–62 census, are included in this section.

Year Book No. 50, pages 1239–45, contains details of the number of retail establishments, the values of retail sales and of retail stocks, and particulars of hairdressing, boot repairing and motor repairing establishments, restaurants, self-service stores and licensed clubs, for each State and Territory, from the results of the 1961–62 census. Major classifications are by commodity groups and type of business. More complete details are set out in published bulletins of the 1961–62 Census of Retail Establishments (*see* page 1211).

Value of retail sales in each commodity group, Australia

The following table shows the value of retail sales of goods in each of the commodity groups specified in the years 1961–62 and 1964–65 to 1967–68 on a comparable basis throughout. The figures for the year 1961–62 were obtained from the census, whereas figures for the other years shown are estimates based on sample surveys.

VALUE OF RETAIL SALES: COMMODITY GROUPS, AUSTRALIA(*a*) 1961-62 AND 1964-65 TO 1967-68

($ million)

Commodity group	*1961–62*	*1964–65*	*1965–66*	*1966–67*	*1967–68*
Groceries	866.8	1,028.0	1,105.6	1,180.8	1,271.8
Butchers' meat	425.8	515.4	553.6	596.0	621.0
Other food(*b*)	736.0	854.4	899.0	953.1	1,002.2
Total, food and groceries	*2,028.6*	*2,397.9*	*2,558.2*	*2,729.8*	*2,895.0*
Beer, wine and spirits(*c*)	551.6	639.0	694.2	753.9	819.5
Clothing and drapery	907.4	1,090.7	1,132.2	1,186.7	1,258.2
Footwear	155.8	179.3	182.5	199.8	211.5
Hardware, china and glassware(*d*)	147.5	165.0	166.0	178.1	186.2
Electrical goods(*e*)	351.6	419.9	405.5	413.3	450.1
Furniture and floor coverings	232.7	306.4	315.3	326.1	357.9
Chemists' goods	268.0	337.1	365.9	392.0	422.4
Newspapers, books and stationery	168.3	205.4	217.7	237.7	253.5
Other goods(*f*)	494.8	615.1	658.8	706.3	737.3
Total (excluding motor vehicles, etc.)	**5,306.5**	**6,355.7**	**6,696.6**	**7,123.5**	**7,591.7**
Motor vehicles, parts, petrol, etc.(*g*)	1,622.0	2,400.4	2,393.4	2,533.7	2,822.3

(*a*) Includes Northern Territory and Australian Capital Territory. (*b*) Includes fresh fruit and vegetables, confectionery, soft drinks, ice cream, cakes, pastry, cooked provisions, fish, etc., but excludes some delivered milk and bread. (*c*) Excludes sales made by licensed clubs. (*d*) Excludes basic building materials, builders' hardware and supplies such as tools of trade, paint, etc. (*e*) Includes radios, television and accessories, musical instruments, domestic refrigerators, etc. (*f*) Includes tobacco, cigarettes, etc., jewellery, sporting goods, etc., but excludes grain and produce and business machines. (*g*) Includes new and used motor vehicles, parts, petrol, etc., but excludes tractors, farm machinery and implements, earth-moving equipment, etc.

Total value of retail sales, States

TOTAL VALUE OF RETAIL SALES (EXCLUDING MOTOR VEHICLES, PARTS, PETROL, ETC.) STATES, 1961-62 AND 1964-65 TO 1967-68

($ million)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust*
1961–62	2,060.4	1,517.1	701.6	451.6	360.3	166.1	15.8	33.4	5,306.5
1964–65	2,403.7	1,821.0	855.1	574.5	437.0	191.0	21.7	51.7	6,355.7
1965–66	2,519.5	1,916.4	897.9	602.0	480.9	198.3	24.7	56.9	6,696.6
1966–67	2,665.6	2,036.8	960.6	627.0	524.0	215.0	28.8	65.7	7,123.5
1967–68	2,838.5	2,161.8	1,015.7	663.0	576.3	227.4	34.4	74.6	7,591.7

TOTAL VALUE OF RETAIL SALES OF MOTOR VEHICLES, PARTS, PETROL, ETC., STATES 1961-62 AND 1964-65 TO 1967-68

($ million)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1961–62	623.1	431.2	218.0	143.1	133.9	53.9	5.8	13.0	1,622.0
1964–65	891.5	645.7	353.0	238.0	169.0	75.7	9.0	18.5	2,400.4
1965–66	885.6	654.0	345.9	220.4	180.9	77.4	9.6	19.6	2,393.4
1966–67	960.3	674.1	352.2	214.0	218.2	79.9	11.2	23.8	2,533.7
1967–68	1,064.6	746.1	393.7	239.3	246.6	85.8	16.5	29.7	2,822.3

INTERSTATE TRADE

Prior to the federation of the Australian Colonies (now States) each Colony published statistics of its trade with the other Colonies. A similar record was continued by the Commonwealth Government under the provisions of the Constitution (section 93). On the expiry of the 'bookkeeping' period these records were discontinued as from 13 September 1910, and the last published statements were for the year 1909. Later, the Governments of Western Australia and Tasmania revived the records, and relevant statistics are available again for those States. A detailed collection for Queensland was re-introduced from July 1953.

At the Conference of Statisticians held in January 1928 it was resolved that efforts should be made in other States to record the interstate movement of certain principal commodities. Complete interstate trade statistics are now published in detail for Queensland, Western Australia and Tasmania by the Deputy Commonwealth Statisticians in those States, and incomplete statistics, relating mainly to trade with Western Australia and Tasmania, by the Deputy Commonwealth Statisticians in the remaining States.

STATISTICAL ORGANISATION IN AUSTRALIA

Early development of Australian statistics

Statistical organisation in Australia was founded in the 'Blue Books' which, in the Crown Colony days, were prepared annually for the information of the Colonial Office. Although intended primarily for administrative purposes, these documents have been important sources of statistical data, and formed the basis from which later statistical publications were developed. Following the advent of responsible government, the 'Blue Book' was succeeded in all States by 'Statistical Registers' which, however, were still largely confined to summaries of the 'by-product' statistics of government administrative departments.

The growing need for quantitative data concerning the progress of the several young communities of Australia led eventually to the appointment of official Statisticians commissioned to prepare and publish such data, and conferences were held between the Statisticians to provide for the interchange of ideas between States and to obtain uniform State statistics which could be aggregated to Australian totals. Altogether, six conferences were held prior to the formation of the Commonwealth Bureau of Census and Statistics in 1906—in 1861, 1875, 1890, 1900, 1902 and 1903. The holding of these conferences has been continued since the formation of the Commonwealth Bureau, and a representative from New Zealand attended up to 1928.

Creation of the Commonwealth Bureau of Census and Statistics

Under the provisions of Section 51 of the Commonwealth Constitution, power is conferred on the Commonwealth Parliament 'to make laws for the peace, order, and good government of the Commonwealth with respect to . . .' (*inter alia*) '(XI.) Census and Statistics'. In compliance with this provision, the *Census and Statistics Act* 1905 was passed, and in 1906 the Commonwealth Bureau of Census and Statistics was created. A conference of Statisticians in 1906 defined the relations between the Commonwealth and State Bureaux, and in each case the State Statistician became the representative in his own State of the Commonwealth Statistician for the purpose of administering the Commonwealth Act. In addition, each State had its own 'Statistics Act', and although these were not identical for all States, they embodied common principles. The Commonwealth Bureau did not attempt to duplicate the existing State statistical organisations, but endeavoured to use their services whenever possible, and undertook the initial collection of statistics only in fields not covered by the States, or in which efficiency demanded complete centralisation.

Integration of statistical services

The creation and development of the Commonwealth Bureau of Census and Statistics, the frequent conferences of Commonwealth and State Statisticians, and the close and increasing liaison between officers dealing with the same subjects in the State and Commonwealth fields did much to promote uniformity in official statistics and methods employed in their collection throughout Australia. The complete realisation of this aim could not, however, be achieved, even with the utmost co-operation of those concerned, while seven separate statistical systems operated. This became apparent when economic problems following the 1914–18 War drew attention to deficiencies in Australian statistical data.

The first step towards integration was taken in 1924, when, in response to a proposal by the Prime Minister to the Premiers' Conference that State and Commonwealth Statistical Bureaux be amalgamated, the Tasmanian office was transferred to the Commonwealth. (Other States did not agree to the proposal at that time.) The Tasmanian office has since functioned as a Commonwealth office which also serves State statistical needs.

The varied economic and social problems of the 1920's and 1930's, the 1939–45 War and the post-war boom, and the development during and since the war of a volume of new statistics, imposed a severe strain on the statistical systems and increased the complexities of the several administrations in their efforts to secure and maintain uniformity in statistical collections.

The difficulties of maintaining efficient statistical services were further emphasised during the immediate post-war years when the problems of planning for post-war reconstruction greatly increased the demand for current economic statistics. In 1949, discussions with the Premiers were initiated by the Prime Minister, with the object of integrating the statistical services of the Commonwealth and the States by agreement. Following negotiations, all State Governments accepted the terms of draft agreements to integrate their respective statistical offices with that of the Commonwealth, and effect was given to this by the *Statistics (Arrangements with States) Act* 1956. This legislation, permissive in nature, was designed to enable the Commonwealth to enter into an agreement with any State to effect an amalgamation of Commonwealth and State statistical offices and services. The object of such an agreement was to establish an integrated statistical service, with branches in each State, operated by Commonwealth statistical officers under the immediate direction of a statistician who would hold office under both the Commonwealth and State Governments. Both Commonwealth and State were to be adequately served with statistics, and no State would be required to surrender its existing powers in the field of statistics. Integration of the Commonwealth and State statistical services was finally accomplished when the integration arrangement with Victoria came into effect on 15 September 1958.

The relationships which at present obtain between the Bureau and the several State Governments are a reflection of these agreements. Each State has retained its power to collect statistics under State laws, but the Commonwealth provides the staff and the funds, and is responsible for all statistical work required by both Commonwealth and State Governments. Annual conferences of the Commonwealth and Deputy Commonwealth Statisticians meet to discuss current and projected future operations of the Bureau.

Under the system as it now operates, Deputy Commonwealth Statisticians and their staffs provide the principal avenue of contact between State Government agencies and other State users and suppliers of statistical information. Special requirements of State users and problems of obtaining statistical information from them are normally dealt with by correspondence between Deputy Statisticians and the Commonwealth Statistician, or are discussed at the annual conferences referred to above. For the most part, negotiations with Commonwealth agencies and other national users and suppliers of statistical information are undertaken by the Commonwealth Statistician and his Central Office staff. However, the division of responsibility between the Bureau's Central and State Offices in the matter of relationships with users and suppliers of statistical information is by no means as precise as might be assumed from the above remarks. The statistical services are highly integrated and operate as one unit rather than as seven separate Bureaux. In general, it might be said that moves to develop new statistical series or to modify existing ones for State purposes are normally initiated by Deputy Statisticians, whereas moves to develop new or modified series for national socio-economic policy purposes are usually initiated by the Commonwealth Statistician.

Scope of the Commonwealth Bureau of Census and Statistics

The scope of the Commonwealth Bureau of Census and Statistics has continually been widened. Additional requirements in the administrative, industrial, financial and scientific spheres have led to the development of many new statistical collections. All these activities are covered by the Census and Statistics Act, which empowers the Statistician to collect information and contains stringent provisions to ensure that the secrecy of information provided by individual persons and businesses is preserved.

In the Australian centralised official statistical service, it is recognised that there is a danger that official statisticians may become isolated from the thinking of the users of statistics and insensitive to the problems of the firms or individual persons whose responsibility it is to supply statistical information. The dangers inherent in this situation are for the most part obviated because the six State Offices of the Bureau keep in very close contact with the individual businesses which use statistics and supply statistical information, and special steps are taken to ensure that users have adequate scope for expression of their needs and that requests for information are kept within reasonable and practical limits. The methods towards this end which have been adopted in the Bureau are reflected in its organisational structure. The organisation is on the basis of specialist subject-matter branches, and to each relatively narrow field of socio-economic activity there is a corresponding branch within the Bureau which is responsible for obtaining statistics and providing statistical services. Thus, for example, in the Central Office, there are specialist branches dealing with primary industries; secondary industries; wholesale and retail trade; employment; population and vital statistics; etc. A broadly similar organisational pattern exists in State Offices of the Bureau, although local requirements have naturally given rise to differences in detail.

Organisation of the Central Office of the Commonwealth Bureau of Census and Statistics

The Central Office of the Bureau is organised functionally into the following branches, listed alphabetically. As shown below, these branches are further sub-divided into specialist subject-matter sections.

Demography and Employment Branch. Demographic and Social; Employment and Field Survey Operations; Population Research.

Finance and Overseas Transactions Branch. Balance of Payments; Overseas Trade and Shipping; Public Finance and Taxation; Private Finance.

National Accounts Branch. National Income and Expenditure; Inter-industry and Sector Financial Accounts.

Population Census Branch. Classifications Research; Field Organisation and Mapping; Operations.

Prices and Labour Branch. Household Expenditure; Labour; Quantum Indexes; Retail Prices; Wholesale Prices and Price Indexes.

Production and Distribution Branch. Development, Integration and Classification; Internal Trade; Primary Industry; Secondary Industry.

Sampling and Methodology Branch. Methodology; Sampling; Special Projects.

Services Branch. Establishments and Finance; Publications; Secretariat.

In addition to the above-mentioned branches, the Bureau's *Computer Service Centre* operates the largest computer network in Australia and one of the largest used for statistical purposes in the world. It comprises Control Data 3600 and 3300 computers in Canberra, 3300, 3200 and 160-A computers in Sydney and Melbourne, and 3200 computers in the remaining State capitals. All installations use a full complement of peripheral devices. Mass storage and interrogation facilities are available at Canberra, Sydney and Melbourne.

At 30 June 1969 the staff of the Bureau numbered approximately 3,080, of whom 618 were university graduates. Of the total staff, some 1,300 were employed in the Bureau's Central Office in Canberra. Expenditure for the year 1968–69 amounted to $15,210,353, of which $1,122,907 was expenditure on equipment of a capital nature.

Relation of the Bureau to other Commonwealth Departments

The Commonwealth Statistician is the co-ordinating authority on all statistical activities in Commonwealth Departments, and where any new statistical field is to be established involving the regular collection of statistics, the Commonwealth Statistician must be consulted to ensure that they are necessary and that they are based on sound statistical methods; furthermore, the Commonwealth Statistician is empowered to make regular inspections of all statistical work undertaken in Departments to ensure that their needs are being met by the most economical means and without duplication of effort.

The Bureau provides methodological and general statistical advice to Commonwealth Departments and instrumentalities from time to time as required. However, for a small number of Departments, which have a continuing need for specialised statistical services, the Bureau provides, from its own staff, the key personnel to serve these needs.

STATISTICAL AND OTHER OFFICIAL PUBLICATIONS OF AUSTRALIA

The official statistical publications of Australia may be divided bibliographically into two main divisions, namely: (i) Commonwealth publications dealing both individually and collectively with the several States of Australia; and (ii) State publications dealing with individual States only. Commonwealth publications containing statistics may be grouped under two heads, namely: (i) publications issued by the Commonwealth Statistician; and (ii) Parliamentary and Departmental Reports and Papers. State publications may similarly be grouped into publications issued by the Deputy Commonwealth Statistician in each State and State Parliamentary and Departmental Reports and Papers. The statistics contained in the second group in each case are in the main incidental to the primary purpose of the particular report or paper.

Publications issued by the Commonwealth Statistician

Principal statistical publications issued to date

The following is a list of the principal statistical publications issued from the Central Office of the Commonwealth Bureau of Census and Statistics since its inauguration. Minor changes in titles have not been referred to. Copies of a number of these publications, particularly earlier issues, are not now available.

Australian Capital Territory Statistical Summary. Annually, 1963 to 1969.

Balance of Payments, Australia. Statements Nos 1 to 3, 1928–29 to 1951–52.

Banking and Currency. Bulletin, annually, 1961–62 and 1962–63 (combined issue) to 1966–67.

‡*Building and Construction.* Bulletin, annually, 1964–65 to 1966–67.

Causes of Death. Bulletin, annually, 1963 to 1967.

Census (1911) *Results.* Bulletin. Vols I (Statistician's Report), II and III, with Appendix *Mathematical Theory of Population.*

Census (1921) *Results.* Bulletins, Nos 1 to 26. Parts I to XVI, forming Vol. I, and Parts XVII to XXIX (Part XXVII, Life Tables), forming, with the Statistician's Report, Vol. II.

Census (1933) *Results.* Bulletins, Nos 1 to 25. Parts I to XIV, forming Vol. I, Parts XV to XXVIII, forming Vol. II, and Parts XXIX to XXXVII, forming, with the Statistician's Report and Australian Life Tables, 1932–1934, Vol. III.

Census (1947) *Results.* Bulletins, Nos 1 to 25. Parts I to XVI, forming Vol. I, Parts XVII to XIX, forming Vol. II, and Parts XX to XXVIII, forming with the Statistician's Report and Australian Life Tables, 1946–1948, Vol. III.

Census (1954) *Results.* Bulletins, Nos 1 to 3. Vols I to VI, comprising respectively Parts I to V for each State; Vol. VII, comprising Parts I to V for the Australian Territories; Vol. VIII, comprising Parts I to III for Australia, Australian Life Tables, 1953–1955, and the Statistician's Report.

Census (1961) *Results.* Vols I to VI, comprising respectively Parts I to V for each State; Vol. VII, comprising Parts I to V for the Australian Territories; and Vol. VIII, comprising Parts I to III for Australia, Australian Life Tables, 1960–1962, and the Statistician's Report.

Census (1966) *Results.* Summarised results for each State and Territory and for Australia have been published in a series of mimeographed bulletins available from the Commonwealth Statistician while the volumes which will contain the final figures are currently being prepared. (*see* pages 1213–4).

**Conference of British Commonwealth Statisticians,* 1951, *Report of Proceedings.*

**Dairying Industry* (formerly *Summary of Dairying Industry*). Statistical Bulletin, monthly and half-yearly; first issue, September 1937.

Demography. Bulletin, annually, 1911 to 1966. Commencing 1963, excludes details of causes of death, *see Causes of Death.*

**Digest of Current Economic Statistics.* Monthly from August 1959 onward.

**Export Commodity Classification, Australian.* Annually, 1966–67 to 1968–69 (sectional revisions).

Exports, Australian. Annually, 1958–59 to 1967–68.

**Factories, Principal Statistics, Summary.* Annually, 1948–49 to 1967–68.

Finance, Bulletin, 1907 to 1960–61. Commencing 1955–56, issued in two parts—Part I, Public and Private Finance; Part II, Commonwealth Taxation. Commencing 1961–62, issued as five separate bulletins, *see* Banking, Finance (2), Insurance, and Taxation.

Finance, Commonwealth. Bulletin, annually, 1961–62 and 1962–63 (combined issue) to 1968–69.

Finance, State, Territory and Local Government Authorities', and Government Securities. Bulletin, annually, 1961–62 and 1962–63 (combined issue) to 1966–67.

**Food Production and the Apparent Consumption of Foodstuffs and Nutrients, Report on.* Statistical Bulletin, half-yearly, 1946–47 to 1947–48; annually, 1948–49 to 1967–68.

**Fruit Growing Industry* (formerly *Summary of Fruit Growing Industry*). Statistical Bulletin, annually, 1944–45 to 1967–68.

**Import Commodity Classification, Australian.* Annually, 1965–66 to 1968–69 (sectional revisions).

Imports, Australian. Bulletin, annually, first issue 1967–68.

Imports Cleared for Home Consumption. Annually, 1950–51 to 1967–68.

Insurance and Other Private Finance (*other than Banking and Currency*). Bulletin, annually, 1961–62 and 1962–63 (combined issue) to 1967–68.

Labour and Industrial Statistics. Memoranda and Reports, various, to 1922.

Labour Report, 1913 to 1965 and 1966 (combined issue).

Life Tables, Australian, 1901–1910. *Australian Joint Life Tables,* 1901–1910.

Life Tables, Australian, 1920–1922.

Life Tables, Australian, 1932–1934. *Australian Joint Life Tables,* 1932–1934.

For footnotes *see* page 1212.

Life Tables, Australian, 1946–1948.

Life Tables, Australian, 1953–1955.

Life Tables, Australian, 1960–1962.

**Livestock Numbers* (formerly *Summary of Livestock Statistics*). Statistical Bulletin, annually, 1943 to 1968.

Local Government in Australia. July 1919.

Manufacturing Industries. Bulletins on individual industries, annually, 1936–37 to 1939–40, 1940–41 (issue incomplete) and 1944–45 to 1967–68.†

Manufacturing Industry. Bulletin, annually, 1963–64 to 1965–66.

Manufacturing Commodities. Bulletin, annually, first issue 1963–64 and 1964–65 (combined issue).

‖*Mineral Industry, The Australian* (formerly *Minerals and Metals Bulletin*). Part 2—*Quarterly Statistics* of a quarterly bulletin issued jointly with the Bureau of Mineral Resources.

Monthly Review of Business Statistics. October 1937 onward.

Motor Vehicles, Census of, 31st December, 1955. Bulletin Nos 1 to 8.

Motor Vehicles, Census of, 31st December, 1962. Bulletins Nos 1 to 9.

Motor Vehicles, Survey of (1947–48), *Results*. Bulletins Nos 1 to 7.

National Accounts, Australian (*National Income and Expenditure*), 1948–49 to 1961–62, first issue, mimeographed*, to 1967–68.

§*Non-rural Primary Industries*. Bulletin, annually, first issue, 1964–65.

Non-rural Primary Industries and Value of Production. Bulletin, annually, 1962–63 and 1963–64. (Commencing 1964–65 issued as two separate Bulletins, *see Non-rural Primary Industries*, and *Value of Production*).

Northern Territory Statistical Summary. Annually, 1960 to 1969.

**Occupation Survey* (1945) *Results*. Detailed tables.

Official Year Book of the Commonwealth of Australia. 1907 to present issue (No. 55). Issues Nos 40 to 51 also published in parts.

Pocket Compendium of Australian Statistics (formerly *Statistical Digest*). 1913, 1914, 1916 and 1918 to 1969, annually.

Population and Vital Statistics. Bulletins and Reports, various, 1906–1910.

Primary Industries. Bulletins, annually, 1950–51 to 1961–62 in two parts—Part I, Rural Industries; Part II, Non-rural Industries and Value of Production. Commencing 1962–63, issued as two separate Bulletins, *see Rural Industries* and *Non-rural Primary Industries and Value of Production*.

Primary Industries, Australian. Report prepared for the Empire Producers Conference, Sydney, March 1938.

Production. Bulletin, annually, 1906 to 1949–50. From 1936–37 to 1949–50 issued in two parts—Part I, Secondary Industries; Part II, Primary Industries (including Total Recorded Production); thereafter separate Bulletins (*see Primary Industries* and *Secondary Industries*).

Professional Papers. Various. A full list appears in Official Year Book No. 13, page 3.

**Publications of the Commonwealth Bureau of Census and Statistics*. Annually since 1950 (1964 to 1969 printed).

Quarterly Summary of Australian Statistics (replaced *Monthly Summary of Australian Statistics*). December 1917 onward.

**Retail Establishments, Census of* (1947–48), *Results*. Bulletins, Nos 1 to 7.

**Retail Establishments, Census of* (1948–49), *Results*. Bulletins, Nos 1 to 7.

**Retail Establishments, Census of* (1952–53), *Results*. Bulletins, Nos 1 to 14.

Retail Establishments, Census of (1956–57), *Results*. Bulletins, Nos 1 to 8 (mimeographed*) and 9 to 15 (printed).

Retail Establishments and Other Services, Census of (1961–62), *Results*. Bulletins Nos 1 to 7 (printed) and 8 and 9 (mimeographed*).

**Rural Holdings, Classification by Size and Type of Activity*, 1959–60. Bulletins, Nos 1 to 7.

Rural Holdings, Classification by Size and Type of Activity, 1965–66. Bulletins, Nos 1 to 7.

Rural Holdings, Size Classification of, 1955–56. Bulletins, Nos 1 to 7.

Rural Industries. Bulletin, annually, 1962–63 to 1965–66.

**Rural Land Use and Crop Production* (formerly *Summary of Crop Statistics*). Statistical Bulletin, annually, 1943–44 to 1967–68.

**Seasonally Adjusted Indicators*. Bulletin, annually, 1967 to 1969.

Secondary Industries. Bulletin, annually, 1950–51 to 1962–63 (commencing 1960–61 issued in two parts—Part I, Factory and Building Operations; Part II, Materials Used and Articles Produced in Factories). Commencing 1963–64 issued as separate bulletins, *see Manufacturing Industry, Manufacturing Commodities*, and *Building and Construction*.

Social Insurance. Report to the Hon. the Minister for Trade and Customs, 1910.

Social Statistics. Bulletin, 1907 to 1915 annually, and 1918.

For footnotes *see* next page.

Superannuation for the Commonwealth Public Service. Report to the Hon. the Minister for Home Affairs, 1910.

Tariff Items and Statistical Key Codes, Description of, Supplement to *Imports Cleared for Home Consumption,* 1966–67 and 1967–68.

Taxation Assessments, Commonwealth. Annually, 1961–62 to 1967–68.

Trade, Overseas. Bulletin, annually, 1906 to 1967–68.

**Trade Overseas.* Preliminary Bulletin, annually, 1952–53 to 1968–69, in two parts—Part 1, Exports; Part 2, Imports. (*See also Exports, Australian* and *Imports Cleared for Home Consumption.*)

Transport and Communication. Bulletin, 1906, 1908 to 1916 annually, 1919 to 1930 annually and 1932 to 1966–67 annually.

§ *Value of Production.* Bulletin, annually, 1964–65 and 1966–67.

Wealth. The Private Wealth of Australia and its Growth as ascertained by various methods, together with a Report on the War Census in 1915.

**Wheat Industry* (formerly *Summary of the Wheat Situation*). Statistical Bulletin, periodically; first issue, July 1936.

**Wool Production and Utilisation.* Bulletin, annually, 1952–53 to 1967–68.

Current or recent statistical publications

The publications listed on the following pages comprise all current or recent publications of the Central Office of the Commonwealth Bureau of Census and Statistics. For further information, including particulars of publications issued by the State offices of the Bureau, *see Publications of the Commonwealth Bureau of Census and Statistics* (*Reference* 1.8, page 1213).

The publications listed are grouped into (i) *General publications*, (ii) *population census publications*, and (iii) *other publications*.

General publications contain statistics on a wide variety of subjects, including all major topics.

Other publications comprise reports, bulletins, statements, surveys, etc., which deal mainly with particular fields or subjects, and are listed alphabetically according to topic. They are of three kinds:

(i) publications (mainly annual) containing detailed tables of the main statistics collected which constitute the Bureau's permanent detailed printed records;
(ii) supplementary publications in mimeographed form (triennial, annual, half-yearly, quarterly, and monthly) which advance the statistics contained in (i), provide further detail, or issue new statistics;
(iii) preliminary reports of special surveys or censuses, such as the Population, Retail Trade and Motor Vehicle Censuses in mimeographed form.

Population census publications have been issued in respect of each Commonwealth census taken from 1911 to 1966, namely 1911, 1921, 1933, 1947, 1954, 1961 and 1966. Only the mimeographed publications issued for the 1966 census and a summarised list of the 1966 census volumes are shown in the following pages, but details of publications for earlier censuses are shown on page 1210. The issue of preliminary figures from the 1966 census in mimeographed form is now complete, and the volumes which will contain the final figures are currently being prepared.

Publications of the *Census of retail establishments and other services* and the *Census of motor vehicles* are listed respectively under the headings of **Retail Trade** and **Transport and Communication.**

Frequency of issue is indicated as follows:

tri — triennially
a — annually
hy — half-yearly
q — quarterly
m — monthly
irr — irregularly
occ — occasionally

The *most recent issue* of each annual publication is shown in parentheses.

Prices. Those publications for which a charge is made are listed at the end of this Year Book. The prices are shown after the number and year of issue—in order, price excluding postage, and price including postage in Australia.

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* Distributed by the Commonwealth Statistician—for methods of obtaining other publications still in print *see* back of this volume.

† *See* pages 1218–9 for 1967–68 series.

‡ Previously included in *Secondary Industries,* Part I—*Factory and Building Operations.*

§ Previously included in *Non-rural Primary Industries and Value of Production.*

‖ Copies available from the Bureau of Mineral Resources, Canberra and the Department of National Development, Melbourne and Sydney.

GENERAL PUBLICATIONS

Reference	
1.1	Official Year Book of the Commonwealth of Australia *a* (No. 55, 1969)
1.2	Pocket Compendium of Australian Statistics *a* (No. 54, 1969)
1.3	Quarterly Summary of Australian Statistics *q*
1.4	Monthly Review of Business Statistics *m*
1.5	Digest of Current Economic Statistics *m**
1.10	Seasonally Adjusted Indicators *a* (1969)*
1.6	Northern Territory Statistical Summary *a* (1969)
1.7	Australian Capital Territory Statistical Summary *a* (1969)
1.8	Publications of the Commonwealth Bureau of Census and Statistics *a* (1969)*
1.9	Monthly Statement of Publications issued by the Commonwealth Bureau of Census and Statistics *m**

1966 CENSUS OF POPULATION AND HOUSING PUBLICATIONS†

Volumes ‡

Volume 1.

Parts 1–11 *Population: Single Characteristics.* (Part 1, Age; Part 2, Marital status; Part 3, Birthplace; Part 4, Nationality; Part 5, Period of residence in Australia; Part 6, Educational attainment; Part 7, Religion; Part 8, Occupational status; Part 9, Industry; Part 10, Occupation; Part 11, Race.)

Volume 2.

Parts 1–5 *Population: Related Characteristics.* (Part 1, Growth and distribution of the population; Part 2, Demographic data; Part 3, The overseas-born population; Part 4, The work force; Part 5, Families and households.)

Volume 3.

Housing.

Volume 4.

Parts 1–7 *Population and dwellings in local government areas.* (Part 1, New South Wales; Part 2, Victoria; Part 3, Queensland; Part 4, South Australia; Part 5, Western Australia, Part 6, Tasmania; Part 7, Northern Territory and Australian Capital Territory.)

Volume 5.

Parts 1–7 *Population and dwellings in localities.* (Part 1, New South Wales; Part 2, Victoria; Part 3, Queensland; Part 4, South Australia; Part 5, Western Australia; Part 6, Tasmania; Part 7, Northern Territory and Australian Capital Territory.)

Volume 6.

Parts 1–6 *Statistician's Report.* (Part 1, Introduction; Part 2, Preparation for the Census; Part 3, The enumeration; Part 4, Processing the data; Part 5, Dissemination of results; Part 6, Evaluation.)

Mimeographed statements issued in respect of the 1966 Census are of two kinds:

(*a*) field count statements, containing preliminary figures compiled by field personnel during the taking of the census; and

(*b*) bulletins, which contain, in general, preliminary summarised particulars of the detailed information that will eventually be published in the appropriate Parts of final printed Volumes of the Census. They should therefore *not* be regarded as providing the final detailed analysis available of the topic in question.

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* Distributed by the Commonwealth Statistician free of charge.
† *See* page 1210 for previous Censuses.
‡ In the course of preparation.

1966 POPULATION CENSUS PUBLICATIONS—*continued*

FIELD COUNT STATEMENTS*

Reference		
2.1	FC 1	Population: Australian Capital Territory
2.2	,, 2	Population: Nauru, Norfolk Island, Christmas Island, and Cocos (Keeling) Islands
2.3	,, 3	Population: States and Territories of Australia
2.4	,, 4	Population: Principal Urban Centres of Australia
2.5	,, 5	Population: Administrative Divisions, Australian Capital Territory
2.6	,, 6	Population: Local Government Areas and Urban Centres, New South Wales
2.7	,, 7	Population: Local Government Areas and Urban Centres, Victoria
2.8	,, 8	Population: Local Government Areas and Urban Centres, Queensland
2.9	,, 9	Population: Local Government Areas and Urban Centres, South Australia
2.10	,, 10	Population: Local Government Areas and Urban Centres, Western Australia
2.11	,, 11	Population: Local Government Areas and Urban Centres, Tasmania
2.12	,, 12	Population: Police Districts, Northern Territory

BULLETINS*

The following bulletins have been issued in this series. The first digit in the bulletin numbers shown indicates the State, etc., to which the bulletin relates, as follows: 1—New South Wales; 2—Victoria; 3—Queensland; 4—South Australia; 5—Western Australia; 6—Tasmania; 7—Northern Territory; 8—Australian Capital Territory; 9—Australia; 10–13—External Territories—e.g. No. 4.3 (*Reference* 2.15) represents the bulletin *Population: By Age and Marital Status, South Australia.*

Reference		
	For each State and Territory and Australia	
2.13	Nos. 1–9.1	Summary of Population
2.14	,, 1–9.2	Summary of Dwellings
2.15	,, 1–9.3	Population: By Age and Marital Status
2.16	,, 1–9.4	Population: By Industry and Age
2.17	,, 1–9.5	Overseas Born Population: By Birthplace and Nationality
2.18	,, 1–9.6	Population: By Industry and Occupational Status
2.19	,, 1–9.7	Population: By Marital Status, Age and Occupational Status
2.20	,, 1–6.8	Population and Dwellings: Local Government Areas and Urban Centres
2.20	,, 7.8	Population and Dwellings: Police Districts
2.20	,, 8.8	Population and Dwellings: Administrative Divisions
2.20	,, 9.8	Population and Dwellings: Local Government Areas and Urban Centres
	For Australia, by States	
2.22		The Aboriginal Population (Revised Statement): States and Territories of Australia
2.23		The Aboriginal Population of Australia: Summary of Characteristics
	For the External Territories	
2.24	No. 10.1	Summary of Population: Census of the Territory of Norfolk Island
2.25	,, 11.1	Summary of Population: Census of the Territory of Christmas Island
2.26	,, 12.1	Summary of Population: Census of the Territory of Cocos (Keeling) Islands
2.27	,, 13.1	Summary of Population: Census of the Territory of Nauru

OTHER PUBLICATIONS

Reference	
	Balance of Payments (*see* **Overseas Trade and Balance of Payments, 8.1, 8.2**)
	Births (*see* **Demography, 4.4, 4.9**)
	Building—
3.1	Building and Construction *a* (No. 3, 1966–67)
3.2	Building Approvals *m**
	Building Societies (*see* **Finance, 5.5**)
3.3	Building Statistics, Australian Capital Territory *q**
3.4	Building Statistics, Northern Territory *q**
3.5	Building Statistics—Number of New Houses and Flats (Preliminary) *q**
3.6	Building Statistics, Quarterly *q**

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* Distributed by the Commonwealth Statistician free of charge.

Reference	
	Deaths (*see* **Demography, 4.7** *to* **4.9, 4.11)**
	Demography—
4.1	Arrivals and Departures, Overseas. Part 1, Permanent and Long-Term Movement *q**
4.2	Arrivals and Departures, Overseas. Part 2, Total and Short-term Movement *q**
4.3	Arrivals and Departures, Overseas *m**
4.4	Births *a*(1968)*
4.5	Canberra City District, Population Count *occ* (1 July 1969)*
4.7	Death, Causes of *a* (No. 5, 1967)
4.8	Deaths *a*(1968)*
4.19	Deaths (Preliminary) *a*(1968)*
4.9	Demography *a* (No. 84, 1966)
2.98	Life Tables, Australian, 1960–62 (1961 Population Census)
4.10	Marriages *a*(1968)*
4.17	Population: Canberra City District *q**
4.15	Population, Estimated Age Distribution, States and Territories *irr* (30 June 1968)*
4.16	Population Estimates (Preliminary) *q**
4.18	Population Estimates: Capital Cities and Principal Cities and Towns *a*(30 June 1968)*
4.13	Projections of the Population, Interim *irr* (1968 to 2001)*
4.14	Twelve Million Australians*†
4.11	Vital and Population Statistics, Summary of *q**
	Divorces (*see* **Social Statistics, 13.1, 13.2)**
	Employment (*see* **Labour, Wages and Employment)**
	Factories (*see* **Secondary Industries)**
	Finance—
5.1	Banking and Currency *a* (No. 6, 1967–68)
5.2	Banking Statistics *m**
5.3	Banking Statistics, Major Trading Banks (Preliminary) *m**
5.4	Banking Statistics (Gazette Extract) *a** and *m**
	Banks, Savings (*see* Savings Bank Statistics)
5.5	Building Societies, Registered *a* (No. 5, 1967–68)*
5.7	Capital Expenditure by Private Businesses in Australia (Preliminary) *q**
5.8	Capital Expenditure by Private Businesses in Australia *q**‡
5.9	Capital Raisings by Companies in Australia, New *q**
5.10	Capital Raisings by Companies in Australia, New (Preliminary) *q**
5.11	Finance and Government Securities, State, Territory and Local Government Authorities' *a* (No. 5, 1966–67)
5.12	Finance, Commonwealth *a* (No. 7, 1968–69)*
5.13	Finance Companies *a* (1968–69)*
5.14	Finance Companies, Australia *m**
5.15	Insurance and Other Private Finance (other than Banking and Currency) *a* (No. 5, 1966–67)
5.16	Insurance, Fire, Marine and General *a* (No. 16, 1967–68)*
5.32	Insurance Statistics, Life *a* (1968)*
5.17	Insurance Statistics, Life *m**
5.18	Instalment Credit for Retail Sales *q**
5.19	Instalment Credit for Retail Sales (Preliminary and Provisional) *m**
5.20	Investment, Overseas *a* (1967–68)*
5.21	Investment, Overseas (Preliminary) *a* (1967–68)*
	National Accounts, Australian (*see* **National Accounts)**
5.23	Pension and Superannuation Schemes, Government *a* (No. 5, 1967–68)*
5.25	Pension Funds, Survey of Selected Private *a* (1967–68)*
5.26	Savings Bank Statistics *m**
5.27	Savings Bank Statistics (Gazette Extract) *a** and *m**
5.28	Savings Bank Statistics (Preliminary) *m**
5.29	Taxation Assessments, Commonwealth *a* (No. 7, 1967–68)
5.30	Taxation Collections, Commonwealth, State and Territory *a* (1967–68)*
5.31	Unit Trusts, Land Trusts and Mutual Funds *q**

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† Special issue.

‡ June and December quarter issues contain, in addition, details of maintenance expenditure, and details of anticipated new capital expenditure for the ensuing six months.

Reference	
	Health
16.1	Hospital and Nursing Home Statistics *a* (1963 to 1967)*
	Income and Expenditure, National (*see* National Accounts)
	Labour, Wages and Employment—
6.1	Earnings and Hours, Survey of Weekly *a* (October 1968)*
6.18	Earnings, Average Weekly *q**
6.4	Employment and Unemployment *m**
6.5	Industrial Awards, Determinations and Collective Agreements, Survey of the Incidence of *irr* (May 1968)
6.6	Industrial Disputes *q**
6.20	Labour Force, The *q**
6.7	Labour Report *a* (No. 52, 1965 and 1966)
6.8	Labour Turnover *hy**
6.9	Leavers from Schools, Universities or Other Educational Institutions, Survey of *a* (February 1967)*
6.10	Multiple Jobholding, Australia, Survey of *irr* (August 1967)*
6.19	Superannuation, Survey of, Victoria *occ* (May 1968)*
6.12	Wage and Salary Earners in Civilian Employment (Preliminary) *m**
6.13	Wage and Salary Earners in Employment *irr* (June 1954 to June 1961)*
6.14	Wage and Salary Earners in Employment *irr* (June 1961 to June 1965)*
6.15	Wage, Minimum Rates of, and Prescribed Hours of Work—Adult Male and Female Occupations (Capital Cities) *hy**
6.16	Wage Rates and Earnings *m**
6.21	Wage Rates Indexes *irr* (June 1965 to June 1968)*
6.17	Wage Rates, Minimum *irr* (March 1939 to June 1965)*
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	Marriages (*see* Demography, 4.9-11)
	Migration, Overseas (*see* Demography, 4.1 *to* 4.3, 4.9)
	Mining and Quarrying (*see* Primary Industries, 10.4, 10.13, 10.17 *to* 10.23, 10.40 *to* 10.43, 10.45)
	Miscellaneous
17.1	Australian Book Publishing *a* (1968)*
	Motor Vehicles (*see* Transport and Communication)
	National Accounts—
7.7	Gross Product by Industry at Current and Constant Prices, Estimates of *a* (1959–60 to 1965–66) (Supplement to Ref. No. 7.1, 1953–54 to 1966–67)*
7.1	National Accounts, Australian—National Income and Expenditure *a* (1967–68)
7.2	National Accounts, Australian (Preliminary Statement No. 1)—Gross National Product at Current and Constant Prices *a* (1967–68)*
7.3	National Accounts, Australian (Preliminary Statement No. 2)—Personal Income by States *a* (1967–68)*
7.4	National Accounts, Australian (Preliminary Statement No. 3)—Gross National Product at Factor Cost, by Industry *a* (1967–68)*
7.5	National Income and Expenditure, Quarterly Estimates *q**
7.6	National Income and Expenditure, Quarterly Estimates (Preliminary) *q**
	Non-rural Primary Industries (*see* Primary Industries)
	Overseas Trade and Balance of Payments—
8.1	Balance of Payments *hy**
8.2	Balance of Payments, Quarterly Summary *q**
8.3	Export Commodity Classification, Australian *a**
8.21	Exports and Imports of Merchandise at Constant Prices†*
8.22	Exports and Imports of Merchandise at Constant Prices *q**
8.4	Exports, Australian *a* (No. 10, 1967–68)
8.5	Exports of Principal Products of Australian Origin *m**
8.6	Import Commodity Classification, Australian *a**
8.19	Imports, Australian *a* (No. 2, 1967–68)

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Reference

8.7 Imports Cleared for Home Consumption *a* (No. 9, 1967–68)
8.8 Imports of Assembled New Passenger Motor Cars (other than Buses or Special Vehicles) *m**
Overseas Investment (*see* **Finance, 5.20, 5.21, Primary Industries, 10.42** *and* **Secondary Industries, 12.19)**
8.9 Overseas Trade, Part 1—Exports *m**
8.10 Overseas Trade, Part 2—Imports *m**
8.11 Overseas Trade *a* (No. 65, 1967–68)
8.12 Overseas Trade, Australia, Exports and Imports (Preliminary) *m**
8.18 Overseas Trade, Exports by Commodity Divisions, Australia *m**
8.13 Overseas Trade, Imports by Commodity Divisions, Australia *m**
8.14 Overseas Trade, Major Groups of Countries *q**
8.15 Overseas Trade (Preliminary)—Part 1, Exports *a* (1968–69)*
8.16 Overseas Trade (Preliminary)—Part 2, Imports *a* (1968–69)*
8.23 Overseas Trade Statistics, Highlights of *q**
8.20 Tariff Items and Statistical Key Codes, Descriptions of *a* (1967–68) **(Supplement** to Imports Cleared for Home Consumption, 1967–68, Bulletin No. 9)
8.17 Trade of Australia with Eastern Countries *a* (1968–69)*

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15.1 Ex-service Personnel, Australian, Survey of *irr* (November 1966)*

Prices and Price Indexes (*see also* **6.7, Labour Report**)

9.1 Consumer Price Index *q**
9.7 Consumer Price Index, Particulars for Sub-groups and Special Groupings *q**
9.2 Export Price Index *m**
9.3 Retail Prices of Selected Food and Grocery Items, Average *q**
9.4 Wholesale Price (Basic Materials and Foodstuffs) Index *m**
9.5 Wholesale Prices—Price Index of Electrical Installation Materials *q**
9.6 Wholesale Price Indexes, Price Index of Materials Used in Building Other than House Building *m**

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10.1 Aerial Agriculture Operations *q**
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10.2 Agricultural Statistics (Preliminary) *a* (1967–68)*
10.3 Bee Farming *a* (1967–68)*
Butter Factories (*see* **Secondary Industries, 12.12.21, 12.16.55)**
10.44 Chicken Hatchings and Poultry Slaughterings *m**
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10.4 Construction Material Quarrying, A.C.T. *a* (1968)*
10.5 Dairying Industry *hy**
10.6 Dairying Industry *m**
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10.7 Farm Machinery on Rural Holdings *a* (March 1968)*
10.8 Fisheries *a* (No. 14, 1967–68)*
10.9 Fisheries (Preliminary) *a* (1967–68)*
10.10 Food Production and the Apparent Consumption of Foodstuffs **and Nutrients** ***a*** (No. 23, 1967–68)*
10.11 Fruit Growing Industry *a* (No. 24, 1967–68)*
10.12 Fruit Statistics (Preliminary) *a* (1967–68)*
10.14 Livestock Numbers *a* (No. 26, March 1968)*
10.15 Livestock Statistics (Preliminary) *a* (March 1969)*
10.16 Meat Industry *m**
10.41 Mineral Exploration *a* (No. 3, 1967)*
10.17 Mineral Industry, The Australian (Quarterly Review and Statistics) *q*
10.18 Minerals and Mineral Products *a* (No. 4, 1967)*
10.40 Minerals and Mineral Products (Preliminary) *a* (1967)*
10.19 Minerals and Mineral Products *m**

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Reference	
10.20	Mining and Quarrying *a* (No. 16, 1967)*
10.21	Mining and Quarrying (Preliminary) *a* (1967)*
10.43	Mining and Quarrying: Value of Output (Preliminary Estimates) *a* (1967)*
10.42	Mining Industry, Australian, Overseas Participation in *a* (1967)*
10.23	Non-rural Primary Industries *a* (No. 1, 1964–65)
10.24	Primary Production, Value of (Preliminary Estimates) *a* (1968–69)*
10.25	Primary Production, Value of (Preliminary Statement) *a* (1967–68)*
10.26	Production, Value of *a* (No. 3, 1966–67)
10.27	Production, Value of, and Indexes of Price and Quantum of Farm Production *a* (No. 18, 1967–68)*
10.28	Rural Holdings, Classification of, by Size and Type of Activity, 1965–66, Bulletins Nos 1–7 (Australia and States) *irr*
10.29	Rural Industries *a* (No. 4, 1965–66)
10.30	Rural Land Use and Crop Production *a* (No. 25, 1967–68)*
10.31	Rural Statistics of the Australian Capital Territory *a* (1968–69)*
10.33	Tea and Coffee, Apparent Consumption of *a* (No. 8, 1968–69)*
	Tractors, New (*see* **Secondary Industries, 12.18**)
10.34	Tractors on Rural Holdings *tri* (March 1966)*
10.35	Wheat Industry *a* (No. 114, 1967–68, and 1968–69 Preliminary)*
10.36	Wheat Industry *a* (No. 115, 1968–69 Preliminary)*—supplement to **No. 114**
10.37	Wine and Brandy, Wholesale Sales and Stocks of *a* (1968–69)*
	Wool, Exports of (*see* **Overseas Trade and Balance of Payments, 8.5**)
10.38	Wool Production and Utilisation *a* (No. 16, 1967–68)*
10.39	Wool Production (Preliminary) *a* (No. 19, 1968–69)*
	Wool Production, Woollen Mills (*see* **Secondary Industries**)
	Production (*see* **Primary Industries** *and* **Secondary Industries**)
	Retail Trade—
11.1	Retail Establishments and Other Services, Census of *irr* (year ended 30 June 1962)— Preliminary Statements Nos 1–14 (Australia and States)* Bulletins Nos 1–7 (Australia and States) Bulletins Nos 8, 9 (Australian Capital Territory and Northern Territory)* Supplementary Collections Nos 1–3—Licensed Clubs; Laundries and Dry Cleaners; Motion Picture Theatres*
11.2	Retail Establishments, Survey of, Australian Capital Territory *a* (1967–68)*
11.3	Retail Establishments, Survey of, Northern Territory *a* (1967–68)*
11.4	Retail Sales of Goods *q**
11.5	Retail Sales of Goods (Preliminary) *q**
11.6	Retail Sales of Goods (Provisional) *m**
	Rural Industries (*see* **Primary Industries**)
	Schools (*see* **Social Statistics, 13.4, 13.5**)
	Secondary Industries—
12.1	Agricultural Machinery Statistics, New *q**
12.2	Construction Machinery and Attachments, Sales of New *q**
12.4	Factories, Summary of Principal Statistics of *a* (No. 20, 1967–68)*
12.5	Factory Production, Indexes of *a* (1949–50 to 1966–67)*
12.7	Factory Products, Principal *a* (No. 17, 1963–64 to 1967–68)*
12.8	Factory Statistics, Australian Capital Territory *a* (1967–68)*
12.9	Factory Statistics, Northern Territory *a* (1967–68)*
12.10	Factory Statistics, Preliminary *a* (1967–68)*
12.11	Manufacturing Commodities *a* (No. 2, 1965–66)
12.12	Manufacturing Industries *a* (1967–68)*— 1. Cement and Cement Goods 2. Bricks, Tiles, Pottery and Earthenware 3. Chemicals, Drugs and Medicines 4. White Lead, Paints and Varnish 5. Chemical Fertilisers 6. Soap and Candles 7. Basic Metal Industries 8. Metal Fabricating Industries

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Reference

9. Motor Vehicles and Cycles
10. Cotton Mills
11. Woollen Mills
12. Rope and Cordage
13. Tanneries
14. Boots and Shoes
15. Clothing (including Hosiery and Knitted Goods)
16. Flour and other Grain Mills
17. Biscuits
18. Confectionery
19. Jam, Fruit, Vegetables, Pickles, Sauces, Condiments, etc.
20. Bacon Curing
21. Butter, Cheese and Condensed, Concentrated, etc., Milk
22. Aerated Waters and Cordials
23. Meat and Fish Preserving
24. Breweries
25. Wineries and Distilleries
26. Tobacco, Cigars and Cigarettes
27. Sawmilling
28. Pulp and Paper Making
29. Rubber Works
30. Brooms and Brushes
31. Electric Light and Power Works
32. Gas Works
33. Plastic Moulding and Products
34. Leather Goods (including Saddlery and Belting)
35. Printing and Stationery

12.13 Manufacturing Industry *a* (No. 4, 1966–67)
12.19 Manufacturing Industry, Australian, Overseas Participation in, Part 1.—Overseas Ownership *irr* (1962–63 and 1966–67)
12.6 Packaging and Associated Items *a* (1967–68)*
12.14 Production Statistics *m**
12.15 Production Statistics (Preliminary) *m**
12.16 Production Summaries *m**—

1. Automotive Spark Plugs and Shock Absorbers
2. Chemicals, etc.
3. Plastics and Synthetic Resins and Plasticisers
4. Paints and Other Surface Coatings
5. Electricity and Gas
6. Soap, Detergents, Glycerine and Fatty Acids
7. Internal Combustion Engines
8. Lawnmowers
9. Electrical Appliances
10. Motor Bodies, Trailed Vehicles, Lift-on Freight Containers, etc.
11. Pedal Cycles
12. Meters
13. Building Fittings
14. Cotton Goods
15. Fellmongering, Woolscouring and Carbonising
16. Wool Top Making and Yarn Produced
17. Wool Woven Fabric
18. Hosiery
19. Women's, Maids' and Girls' Clothing
20. Cellulosic and Synthetic Fibre Tops, Yarns and Woven Fabrics
21. Paper, Wood Pulp and Adhesive Tapes
22. Floor Coverings and Felts
23. Electric Motors
24. Men's, Youths' and Boys' Clothing
25. Foundation Garments
27. Gloves and Slide Fasteners
28. Footwear

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Reference

29. Biscuits, Cocoa, Confectionery, Ice Cream
30. Storage Batteries—Wet Cell
32. Perambulators, Pushers and Strollers
33. Motor Vehicles
34. Television and Radio Sets, etc., and Transistors
35. Bed Bases and Mattresses
36. Processed Milk Products
38. Fish Preserving
39. Jams and Preserved Fruit and Vegetables
40. Cereal Products
41. Vegetable Oils, Margarine and other Edible Processed Fats
42. Malt and Beer
43. Stock and Poultry Meals (including Bran and Pollard)
45. Phonograph Records
47. Aerated and Carbonated Waters, Cordials and Syrups
48. Sports Goods
49. Building Materials
50. Electrodes for Manual Welding
51. Hides and Skins used for Tanning
52. Electrical Power Frequencies Transformers, Chokes and Ballasts
53. Plastics Film, Sheeting and Coated Materials
55. Butter and Cheese
56. Canned Meat
58. Steel Wire and Wire Products
59. Non-ferrous Rolled, Extruded and Drawn Products

12.17 Textile Industries, Machines Installed *a* (30 June 1967 and 1968)*
12.18 Tractors, New, Receipts, Sales and Stocks *q**

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13.1 Divorce *a* (1968)*
13.2 Divorce *q**
13.4 School Enrolments *a* (1968)*
13.5 Schools *a* (1968)*
13.6 Universities (Preliminary) *a*—Students and Staff (1969); Finance (1968)*
13.7 University Statistics, Part 1. Students and Degrees Conferred *a* (1968)*
13.8 University Statistics, Part 2. Staff and Libraries *a* (1968)*
13.9 University Statistics, Part 3. Finance *a* (1967)*

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14.1 Motor Vehicle Registrations *a* (1968)*
14.2 Motor Vehicle Registrations *m**
14.3 Motor Vehicle Usage, Survey of (Preliminary) *irr* (1963)*
14.4 Motor Vehicle Usage, Survey of (Preliminary) States and Territories *irr* (1963)*
14.5 Motor Vehicles, Census of *irr* (31 December 1962)—
  Preliminary Statements Nos 1–9 (Australia, States and Territories)*
  Bulletins Nos 1–9 (Australia, States and Territories)
14.6 New Motor Vehicles, Registrations of (Preliminary) *m**
14.7 New Motor Vehicles, Registrations of, Make of Vehicle (Preliminary) *a* (1968)*
14.8 New Motor Vehicles, Registrations of, Make of Vehicle (Preliminary) *m**
14.9 Road Traffic Accidents Involving Casualties *q**
14.12 Road Traffic Accidents Involving Casualties, Northern Territory *q**
14.10 Shipping Cargo, Overseas *m**
14.11 Transport and Communication *a* (No. 58, 1966–67)

University Statistics (*see* **Social Statistics, 13.6** *to* **13.9)**

Value of Production (*see* **Primary Industries, 10.24** *to* **10.27, 10.43)**

Vital Statistics (*see* **Demography, 4.4, 4.7** *to* **4.11, 4.15** *to* **4.19)**

Wages (*see* **Labour, Wages and Employment)**

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Further information on current or recent publications of the Commonwealth Bureau of Census and Statistics is contained in *Publications of the Commonwealth Bureau of Census and Statistics*, April 1969, available free on request from the Commonwealth Statistician, Canberra. This contains a list of all Bureau publications, a subject index to show the Central Office publications in which information on the various subjects dealt with by the Bureau is to be found, and short descriptions of major Central Office publications. The information on issues in this publication is supplemented in monthly statements.

Publications issued by the Deputy Commonwealth Statisticians

A list of the current publications issued by the Deputy Commonwealth Statistician of each State appears in *Publications of the Commonwealth Bureau of Census and Statistics*, April 1969, and this information is supplemented also in the monthly statements mentioned above.

Commonwealth and State Parliamentary and Departmental Reports and Papers

No comprehensive list of current publications of this nature is available, but the National Library of Australia issues an annual publication *Australian Government Publications*, a list of official publications of the Commonwealth, States and Territories, compiled from records of material received by the Library during the year.

The Publications Branch of the Commonwealth Government Printing Office, Canberra, issues a monthly publication *Australian Government Publications* and at irregular intervals Consolidated Lists. These publications list Commonwealth publications currently becoming available or in stock, showing the titles and prices of Parliamentary Papers, Parliamentary Debates (Hansard), records of Parliamentary proceedings, Acts, Statutory Rules, Ordinances, and departmental bulletins and reports issued annually or irregularly.

Australian Government publications may be obtained from the Director of Publications, Commonwealth Government Printing Office, Canberra, A.C.T. 2600; and from or through the Publications Branch Book Counter, The Foyer, Commonwealth Centre, Sydney; the Commonwealth Sub-Treasury in each State capital city; the New South Wales Government Information and Sales Centre, Sydney; the Commonwealth Government Bookshop, 347 Swanston Street, Melbourne; or booksellers.

The National Library of Australia issues annually a publication *Australian Books*, a reprint of the 1966 issue of which is included on pages 1231–77 of Year Book No. 53. *See* page 534 of the chapter Education, Cultural Activities and Research for further information concerning the National Library's publicising of Australian publications.

STATISTICAL SUMMARY: AUSTRALIA

In earlier issues of the Year Book, it was the practice to include in the Statistical Summary figures for every tenth year of the period 1861 to 1901, plus the latest year for which data were available. In each subsequent issue the latest year available was substituted for the year immediately preceding it until the next tenth year had been reached, and the earliest year in the series was eliminated as space was needed. In consequence of this system no single issue of the Year Book contained a continuous yearly series.

In this and the previous issue of the Year Book, this defect has been remedied in part by the inclusion of a continuous series back to the year 1941, with earlier tenth years back to 1901 (the National Accounts series on page 1232 has been carried back to 1900–01 in single years). In issue No. 39, pages xxviii–xxix, some of the series are shown for every tenth year from 1861 to 1941. There are, however, discrepancies between the original series and the series now published.

It is intended that in future issues of the Year Book, as circumstances permit, the continuous series will be carried further back and that other series will be added, although it will not be possible to carry all of them back to the earlier years.

Breaks in series, preliminary figures, etc. are indicated by the symbols shown on page xiii of this Year Book.

STATISTICAL SUMMARY: AUSTRALIA

DEMOGRAPHY

Year nded 1 De-ember—	*Population(a)*			*Natural increase*	*Overseas migration(b)*	*Marriages*		*Divorces(c) and judicial separations*	*Births*		*Deaths*		*Infant beaths*	
	Males	*Females*	*Persons*			*No.*	*Rate(d)*		*No.*	*Rate(d)*	*No.*	*Rate(d)*	*No.*	*Rate(e)*
	'000	'000	'000	'000	'000	'000		No.	'000		'000		'000	
901	2,005	1,820	3,825	56.6	17.8	28	7.3	398	103	27.2	46	12.2	**10.7**	**103.6**
911	2,382	2,192	4,574	74.3	77.7	39	8.8	509	122	27.2	48	10.7	**8.4**	**68.5**
921	2,799	2,712	5,511	82.1	17.3	47	8.6	1,490	136	25.0	54	9.9	**9.0**	**65.7**
931	3,333	3,220	6,553	61.9	−10.8	39	6.0	1,969	119	18.2	57	8.7	**5.0**	**42.1**
941	3,599	3,545	7,144	(*f*) 63.3	(*g*) 5.2	75	10.6	3,351	135	18.9	(*h*) 71	(*h*) 10.0	**5.3**	**39.7**
942	3,620	3,581	7,201	(*f*) 61.5	(*g*) 6.2	86	12.0	3,588	137	19.1	(*h*) 75	(*h*) 10.5	**5.4**	**39.5**
943	3,648	3,621	7,270	(*f*) 74.8	(*g*) 1.3	68	9.4	4,686	149	20.6	(*h*) 74	(*h*) 10.3	**5.4**	**36.3**
944	3,683	3,664	7,347	(*f*) 83.7	(*g*) −2.2	68	9.3	5,691	153	21.0	(*h*) 70	(*h*) 9.5	**4.8**	**31.3**
945	3,722	3,708	7,430	(*f*) 90.3	(*g*) −2.6	63	8.5	7,213	161	21.7	(*h*) 70	(*h*) 9.5	**4.7**	**29.4**
946	3,767	3,751	7,518	(*f*) 101.7	(*g*) −15.1	79	10.6	7,235	176	23.6	(*h*) 75	(*h*) 10.0	**5.1**	**29.0**
947	3,828	3,810	7,638	(*f*) 108.9	(*g*) 10.6	76	10.1	8,803	182	24.1	(*h*) 73	(*h*) 9.7	**5.2**	**28.5**
948	3,909	3,884	7,792	101.1	55.1	75	9.7	7,253	178	23.1	77	10.0	**4.9**	**27.8**
949	4,047	3,998	8,046	106.0	150.0	73	9.2	6,626	181	22.9	75	9.5	**4.6**	**25.3**
950	4,191	4,116	8,307	112.4	152.5	76	9.2	7,428	191	23.3	78	9.6	**4.7**	**24.5**
951	4,311	4,217	8,528	111.5	111.4	77	9.2	7,330	193	23.0	82	9.7	**4.9**	**25.2**
952	4,426	4,314	8,740	120.1	94.0	74	8.6	7,110	202	23.4	82	9.5	**4.8**	**23.8**
953	4,503	4,399	8,903	122.0	42.9	71	8.0	8,043	202	22.9	80	9.1	**4.7**	**23.3**
954	4,598	4,492	9,090	120.5	68.2	71	7.9	6,528	202	22.5	82	9.1	**4.5**	**22.5**
955	4,714	4,598	9,312	125.6	97.3	72	7.8	6,782	208	22.6	82	8.9	**4.6**	**22.0**
956	4,829	4,702	9,531	126.0	94.0	72	7.6	6,492	212	22.5	86	9.1	**4.6**	**21.7**
957	4,930	4,814	9,744	135.4	78.7	74	7.6	6,374	220	22.9	85	8.8	**4.7**	**21.4**
958	5,026	4,921	9,947	138.8	65.4	74	7.5	6,994	223	22.6	84	8.5	**4.6**	**20.5**
959	5,132	5,029	10,161	137.8	76.8	74	7.4	7,370	227	22.6	89	8.9	**4.9**	**21.5**
960	5,253	5,139	10,392	141.9	90.1	75	7.3	6,709	230	22.4	88	8.6	**4.6**	**20.2**
961	(*i*) 5,374	(*i*) 5,268	(*i*) 10,643	151.0	61.5	77	7.3	6,751	240	22.8	89	8.5	**4.7**	**19.5**
962	5,470	5,376	10,846	143.9	62.5	79	7.4	7,290	237	22.2	93	8.7	**4.8**	**20.4**
963	5,572	5,484	11,055	140.8	71.6	81	7.4	7,515	236	21.6	95	8.7	**4.6**	**19.5**
964	5,683	5,597	11,280	128.6	99.3	86	7.7	7,967	229	20.6	101	9.0	**4.4**	**19.1**
965	5,794	5,712	11,505	123.1	104.9	94	8.2	8,534	223	19.6	100	8.8	**4.1**	**18.5**
966	5,895	5,816	11,710	118.7	86.9	96	8.3	9,921	223	19.3	104	9.0	**4.0**	**18.2**
967	6,005	5,924	11,929	(*j*) 126.6	91.9	(*j*) 100	(*j*) 8.5	9,746	(*j*) 229	(*j*) 19.4	(*j*) 103	(*j*) 8.7	**(*j*) 4.2**	**(*j*) 18.3**
968	6,129	6,045	12,173	131.4	113.1	106	8.8	10,789	241	20.0	110	9.1	**4.3**	**17.8**

(*a*) At 31 December. (*b*) Excess of arrivals over departures. Minus sign (−) indicates excess of departures over arrivals.) Decrees made absolute, including decrees for nullity of marriage. (*d*) Number per 1,000 of mean population. From 1967, number f marriages, births or deaths (including Aboriginal events) per 1,000 of mean population, including Aborigines. (*e*) Number per 1,000 ve births. From 1967, total number of infant deaths (including Aboriginal deaths) per 1,000 of total live births. (*f*) Excess of births ver civilian deaths from September 1939 to June 1947. (*g*) Excludes movements of defence personnel from September 1939 to June 1947.) Excludes deaths of defence personnel from September 1939 to June 1947. (*i*) Includes Aborigines. (*j*) Includes Aborigines. *See* otnotes (*d*) and (*e*).

PRIMARY INDUSTRIES

AGRICULTURE

Season		Wheat			Oats			Barley			Maize		
		Area	Yield	Average yield	Area	Yield	Average yield	Area	Yield	Average yield	Area	Yield	Average yield
		mil acres	mil bus	bus	'000 acres	mil bus	bus	'000 acres	mil bus	bus	'000 acres	mil bus	bus
1901–02	.	5.1	39	7.5	461	9.8	21.2	75	1.5	20.4	295	7.0	23.9
1911–12	.	7.4	72	9.6	617	9.6	15.5	116	2.1	17.7	340	8.9	26.3
1921–22	.	9.7	129	13.3	733	12.1	16.6	299	6.1	20.4	305	7.8	25.7
1931–32	.	14.7	191	12.9	1,085	15.2	14.0	342	6.3	18.4	269	7.1	26.2
1941–42	.	12.0	167	13.9	1,460	22.3	15.3	784	18.0	23.0	301	7.4	24.7
1942–43	.	9.3	156	16.8	1,497	21.5	14.4	451	8.3	18.4	285	6.9	24.2
1943–44	.	7.9	110	13.9	1,415	17.7	12.5	443	7.6	17.1	283	7.4	26.3
1944–45	.	8.5	53	6.3	2,034	9.0	4.4	614	5.0	8.2	257	6.5	25.2
1945–46	.	11.4	142	12.5	1,949	25.8	13.2	699	11.1	15.9	236	5.7	24.3
1946–47	.	13.2	117	8.9	1,728	15.6	9.0	748	11.6	15.5	260	5.8	22.4
1947–48	.	13.9	220	15.9	2,105	40.7	19.3	839	20.9	24.9	223	6.2	27.7
1948–49	.	12.6	191	15.2	1,770	23.6	13.3	1,012	17.8	17.6	182	5.2	28.5
1949–50	.	12.2	218	17.8	1,748	27.4	15.7	1,040	19.5	18.8	194	6.0	31.0
1950–51	.	11.7	184	15.8	1,757	25.1	14.3	1,079	22.9	21.2	169	4.7	27.9
1951–52	.	10.4	160	15.4	2,365	34.5	14.6	1,118	21.9	19.6	170	4.0	23.7
1952–53	.	10.2	195	19.1	2,764	43.6	15.8	1,377	35.0	25.5	174	5.0	28.5
1953–54	.	10.8	198	18.4	2,137	33.0	15.4	1,803	41.3	22.9	179	5.1	28.4
1954–55	.	10.7	169	15.8	2,574	32.8	12.8	1,691	29.4	17.4	170	5.1	29.9
1955–56	.	10.2	195	19.2	3,354	56.5	16.8	1,894	41.7	22.0	167	4.8	28.4
1956–57	.	7.9	134	17.1	2,556	35.4	13.8	2,093	49.3	23.5	182	5.5	30.3
1957–58	.	8.8	98	11.0	2,959	31.4	10.6	2,121	30.5	14.4	184	5.6	30.6
1958–59	.	10.4	215	20.7	3,974	86.9	21.9	2,381	63.0	26.5	180	6.7	37.4
1959–60	.	12.2	199	16.3	3,030	46.8	15.5	2,379	34.2	14.3	185	6.7	36.4
1960–61	.	13.4	274	20.4	3,637	76.1	20.9	2,830	68.0	24.0	185	6.2	33.8
1961–62	.	14.7	247	16.8	3,097	55.1	17.8	2,383	41.5	17.4	211	7.3	34.7
1962–63	.	16.5	307	18.6	3,292	68.8	20.9	2,027	39.6	19.5	209	7.3	35.6
1963–64	.	16.5	328	19.9	3,392	68.2	20.1	2,013	43.4	21.6	215	6.7	31.3
1964–65	.	17.9	369	20.6	3,497	70.0	20.0	2,064	49.3	23.9	212	6.9	32.4
1965–66	.	17.5	260	14.8	3,768	60.7	16.1	2,298	41.8	18.2	197	4.9	25.0
1966–67	.	20.8	467	22.4	4,258	107.1	25.2	2,498	61.6	24.7	201	7.5	37.2
1967–68	.	22.4	277	12.4	3,380	39.6	11.7	2,611	36.8	14.1	200	7.1	35.6
1968–69p	.	26.6	540	20.3									

AGRICULTURE—*continued*

Season		Hay			Potatoes			Sugar-cane(a)			Vineyards		All crops
		Area	Yield	Average yield	Area	Yield	Average yield	Area	Yield	Average yield	Area	Wine made	Area
		'000 acres	'000 tons	tons	'000 acres	'000 tons	tons	'000 acres	'000 tons	tons	'000 acres	mil gal	mil acres
1901–02	.	1,688	2,025	1.20	110	323	2.94	87	1,368	15.7	64	5.3	8.4
1911–12	.	2,518	2,868	1.14	130	301	2.31	101	1,682	16.7	61	5.0	12.1
1921–22	.	2,995	3,902	1.30	149	388	2.60	128	2,437	19.0	92	8.5	15.4
1931–32	.	2,635	3,167	1.20	145	397	2.74	242	4,213	17.4	115	14.2	21.2
1941–42	.	2,758	3,575	1.30	99	333	3.35	255	5,154	20.3	130	15.6	(b)20.5
1942–43	.	2,359	3,116	1.32	140	484	3.45	241	4,692	19.5	130	19.1	(b)17.5
1943–44	.	2,044	2,717	1.33	192	599	3.12	229	3,688	16.1	129	19.1	(b)16.1
1944–45	.	2,409	1,994	0.83	242	881	3.64	226	4,598	20.3	129	13.9	(b)17.7
1945–46	.	2,757	3,493	1.27	176	646	3.67	236	4,718	20.0	129	24.9	(b)20.6
1946–47	.	2,006	2,357	1.18	145	544	3.76	227	4,027	17.7	130	32.0	(b)21.3
1947–48	.	1,970	3,008	1.53	146	498	3.42	222	4,418	19.9	132	32.9	(b)22.5
1948–49	.	1,580	2,292	1.45	120	460	3.84	266	6,708	25.2	135	32.8	(b)20.9
1949–50	.	1,605	2,430	1.51	134	471	3.52	281	6,849	24.3	135	32.7	(b)20.8
1950–51	.	1,377	2,063	1.50	127	412	3.24	272	7,052	25.9	137	26.0	(b)20.1
1951–52	.	1,549	2,345	1.51	118	509	4.31	282	5,327	18.9	136	35.3	(b)20.0
1952–53	.	1,761	2,765	1.57	135	431	3.18	280	6,967	24.9	137	30.0	(b)20.7
1953–54	.	1,935	3,049	1.58	128	548	4.27	340	9,014	26.5	138	31.7	(b)21.5
1954–55	.	1,984	2,856	1.44	107	468	4.36	374	10,087	27.0	136	24.0	22.3
1955–56	.	2,241	3,625	1.62	94	402	4.29	373	8,901	23.9	135	22.9	23.0
1956–57	.	1,861	3,043	1.63	101	519	5.14	370	9,272	25.1	132	30.8	20.0
1957–58	.	2,237	2,969	1.33	118	575	4.88	376	9,249	24.6	131	33.9	22.2
1958–59	.	3,018	5,090	1.69	105	575	5.49	370	10,213	27.6	131	32.6	25.6
1959–60	.	2,105	3,177	1.51	108	579	5.34	314	9,002	28.7	130	28.4	26.1
1960–61	.	2,973	5,079	1.71	92	451	4.91	341	9,166	26.9	131	33.8	29.6
1961–62	.	2,274	3,693	1.62	94	526	5.57	387	9,577	24.8	133	41.7	29.6
1962–63	.	2,720	4,717	1.73	114	667	5.86	402	12,736	31.7	134	29.9	32.1
1963–64	.	2,602	4,269	1.64	102	562	5.51	418	12,118	29.0	136	37.5	32.0
1964–65	.	2,793	4,963	1.78	88	508	5.78	470	15,070	32.0	139	38.7	34.7
1965–66	.	2,780	4,179	1.50	96	639	6.63	503	14,155	28.1	140	34.1	34.5
1966–67	.	3,496	6,371	1.82	99	643	6.47	557	16,685	29.9	139	41.5	39.6
1967–68	.	2,800	3,812	1.36	106	658	6.23	553	16,756	30.3	140	44.3	40.2

(*a*) Cane cut for crushing. (*b*) Excludes Northern Territory.

PRIMARY INDUSTRIES—*continued*

PASTORAL, DAIRYING, ETC.

ear nded 30 une—	*Livestock(a)*				*Wool (b)(c)*	*Butter*	*Cheese*	*Meat(d)*			
	Horses	*Cattle*	*Sheep*	*Pigs*				*Beef and veal*	*Mutton and lamb*	*Pigmeat*	*Total meat*
	mil	mil	mil	mil	mil lb	'000 tons	'000 tons	'000 tons	'000 tons	'000 tons	'000 tons
902 . .	1.6	8.5	72	0.9	539	(*e*)46	(*e*)5.3	n.a.	n.a.	n.a.	n.a.
912 . .	2.3	11.8	97	1.1	798	(*e*)95	(*e*)7.1	n.a.	n.a.	n.a.	n.a.
922 . .	2.4	14.4	86	1.0	723	(*e*)119	(*e*)14.6	339	218	50	608
932 . .	1.8	12.3	111	1.2	1,007	175	14.0	350	307	70	727
942 . .	1.6	13.6	125	1.4	1,167	168	30.1	534	372	122	1,027
943 . .	1.5	14.0	125	1.6	1,147	171	36.1	534	413	109	1,057
944 . .	1.4	14.2	123	1.7	1,169	156	35.8	501	429	114	1,043
945 . .	1.4	14.1	105	1.6	1,016	142	34.6	461	395	127	984
946 . .	1.3	13.9	96	1.4	936	150	41.2	407	291	108	805
947 . .	1.2	13.4	96	1.3	977	143	42.4	488	303	95	885
948 . .	1.2	13.8	103	1.3	1,005	162	41.5	562	295	90	947
949 . .	1.1	14.1	109	1.2	1,057	166	43.2	577	320	94	992
950 . .	1.1	14.6	113	1.1	1,142	174	44.8	607	358	90	1,055
951 . .	1.0	15.2	116	1.1	1,118	164	44.3	652	274	85	1,011
952 . .	0.9	14.9	118	1.0	1,080	135	40.6	582	282	85	949
953 . .	0.9	15.2	123	1.0	1,281	167	46.6	675	395	83	1,153
954 . .	0.8	15.6	127	1.2	1,245	160	49.1	704	365	84	1,153
955 . .	0.8	15.8	131	1.3	1,283	191	45.2	720	388	99	1,207
956 . .	0.8	16.5	139	1.2	1,417	209	38.7	751	380	94	1,225
957 . .	0.7	17.3	150	1.3	1,564	193	45.2	815	367	89	1,270
958 . .	0.7	16.9	149	1.4	1,434	176	36.0	791	421	102	1,315
959 . .	0.7	16.3	153	1.3	1,591	194	43.5	906	492	102	1,501
960 . .	0.6	16.5	155	1.4	1,680	198	44.9	752	573	101	1,426
961 . .	0.6	17.3	153	1.6	1,625	182	47.1	633	574	107	1,315
962 . .	0.6	18.0	158	1.7	1,699	199	55.7	791	587	120	1,498
963 . .	0.5	18.5	159	1.4	1,673	202	58.7	914	593	114	1,622
964 . .	0.5	19.1	165	1.5	1,785	204	58.2	985	586	111	1,683
965 . .	0.5	18.8	171	1.7	1,784	203	61.6	1,010	585	120	1,715
966 . .	n.a.	17.9	158	1.7	1,663	206	58.6	931	599	133	1,663
967 . .	0.5	18.3	164	1.8	1,762	218	68.7	865	587	140	1,591
968 . .	n.a.	19.2	167	2.1	1,770	193	69.4	890	654	147	1,691
969p .	n.a.	20.8	176	2.3	1,939	196	72.9	923	661	159	1,743

(*a*) At 31 December of previous year for years to 1942, at 31 March thereafter. (*b*) In terms of greasy. (*c*) 1901–02 and 1911–12, ear ended previous December; then until 1946–47, year ended March; 1947–48 onwards, year ended June. (*d*) Carcass weight in terms f fresh meat. (*e*) Year ended previous December.

MINERALS

ear ended 1 December—	*Copper(a)*	*Gold(a)*	*Lead(a)*	*Zinc(a)*	*Black coal*	*Brown coal*
	'000 tons	'000 fine oz	'000 tons	'000 tons	mil tons	mil tons
901 . . .	29.4	3,300	n.a.	(*b*)	6.9	(*b*)
911 . . .	45.3	2,484	221.7	238.1	10.5	(*b*)
921 . . .	11.0	758	81.0	139.5	12.8	0.1
931 . . .	13.6	595	148.4	74.2	8.4	2.2
941 . . .	22.4	1,497	291.1	247.2	14.2	4.6
942 . . .	21.1	1,154	261.7	220.7	14.9	4.9
943 . . .	25.5	751	205.5	181.2	14.1	5.1
944 . . .	29.8	657	188.8	173.7	13.7	5.0
945 . . .	26.1	657	162.8	150.3	12.8	5.4
946 . . .	18.8	824	181.4	172.0	13.9	5.7
947 . . .	14.0	938	192.9	182.5	14.8	6.1
948 . . .	12.6	886	210.2	190.7	14.8	6.7
949 . . .	13.7	889	211.8	191.6	14.1	7.4
950 . . .	17.6	870	225.4	197.8	16.5	7.3
951 . . .	18.1	896	212.0	189.2	17.6	7.8
952 . . .	18.9	980	228.3	196.5	19.4	8.1
953 . . .	37.5	1,075	269.3	239.4	18.4	8.3
954 . . .	41.9	1,118	284.9	252.7	19.8	9.3
955 . . .	47.3	1,049	295.9	256.6	19.3	10.1
956 . . .	54.5	1,030	299.5	278.1	19.3	10.6
957 . . .	59.3	1,084	333.8	318.9	19.9	10.7
958 . . .	75.7	1,104	328.3	293.7	20.4	11.6
959 . . .	95.0	1,085	316.3	275.4	20.3	13.0
960 . . .	109.4	1,087	308.2	317.5	22.6	15.0
961 . . .	95.6	1,076	269.7	311.2	24.0	16.3
962 . . .	107.0	1,069	370.1	337.5	24.5	17.1
963 . . .	113.0	1,024	410.3	351.5	24.9	18.5
964 . . .	104.1	964	374.9	344.6	27.4	19.0
965 . . .	90.4	878	362.1	349.2	31.4	20.7
966 . . .	109.5	917	364.9	369.3	33.3	21.8
967 . . .	90.4	805	375.8	400.5	34.7	23.4
968 . . .	106.9	786	381.3	413.5	40.3	23.0

FORESTRY

Year ended 30 June—	*Sawn output of Aust. grown timber*
	mil super feet
1902 . . .	(*c*)452
1912 . . .	(*c*)605
1922 . . .	590
1932 . . .	237
1942 . . .	914
1943 . . .	856
1944 . . .	850
1945 . . .	842
1946 . . .	895
1947 . . .	1,050
1948 . . .	1,117
1949 . . .	1,184
1950 . . .	1,223
1951 . . .	1,261
1952 . . .	1,393
1953 . . .	1,340
1954 . . .	1,400
1955 . . .	1,449
1956 . . .	1,451
1957 . . .	1,419
1958 . . .	1,391
1959 . . .	1,460
1960 . . .	1,521
1961 . . .	1,418
1962 . . .	1,352
1963 . . .	1,416
1964 . . .	1,487
1965 . . .	1,533
1966 . . .	1,515
1967 . . .	1,469
1968 . . .	1,482
1969 . . .	1,449

(*a*) Metallic content of minerals produced. (*b*) Less than 0.05. (*c*) Year ended previous December.

SECONDARY INDUSTRIES

FACTORIES(*a*)

Year ended 30 June—	Number	Persons employed (*b*)	Salaries and wages paid(*c*)	Net value of production(*d*)							Value of	
				Chemicals, etc.	Industrial metals, etc.	Textiles, etc.	Clothing	Food, etc.	Paper, etc.	All groups	Plant and machinery(*e*)	Land and buildings(*e*)
	'000	'000	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m
1902(*f*)	(*g*)	(*g*)	(*g*)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	58.2	n.a.	n.a.
1912(*f*)	14.5	312	55	2.2	24.1	15.0		23.6	8.5	108.3	63.2	65.0
1922	18.0	379	136	6.4	47.2	38.4		54.4	18.0	225.0	156.2	134.6
1932	21.7	337	112	15.8	45.6	13.8	22.2	57.4	19.2	222.0	243.1	213.2
1942	27.0	725	360	59.6	239.8	42.0	47.2	106.4	34.2	633.0	338.4	312.7
1943	26.4	759	418	58.2	296.4	43.6	46.4	113.7	34.5	704.0	353.9	335.2
1944	27.7	767	434	51.9	314.8	45.5	49.8	118.3	36.7	732.5	362.0	354.3
1945	28.9	751	415	47.0	295.2	44.6	55.3	124.9	39.3	724.6	367.8	365.2
1946	31.2	745	412	45.2	259.4	44.1	59.7	124.0	41.0	704.6	371.1	373.2
1947	34.8	805	474	49.0	292.8	53.9	73.7	138.3	52.2	821.7	379.4	386.9
1948	37.4	849	572	57.3	362.6	64.2	86.7	156.3	59.2	978.6	427.4	422.3
1949	40.1	890	678	67.1	421.7	71.7	104.5	179.6	70.6	1,137.5	493.0	465.5
1950	41.6	917	772	81.3	492.5	85.9	115.4	202.0	86.0	1,323.1	571.2	519.1
1951	43.1	969	983	105.4	654.0	109.2	143.5	236.6	109.5	1,687.7	673.2	605.6
1952	45.8	978	1,224	127.4	826.2	113.2	162.2	282.2	136.4	2,049.7	820.3	719.0
1953	47.7	933	1,270	135.7	842.6	129.7	165.6	328.7	136.6	2,165.7	987.1	828.9
1954	49.6	990	1,410	164.6	936.6	157.1	187.1	355.8	158.6	2,454.1	1,161.4	966.9
1955	51.1	1,031	1,563	196.3	1,065.9	156.8	196.8	373.1	181.1	2,731.0	1,396.6	1,112.0
1956	52.4	1,060	1,707	238.3	1,193.9	163.6	204.9	395.6	198.1	3,001.4	1,595.7	1,307.1
1957	53.2	1,063	1,782	273.8	1,281.7	182.9	211.0	428.9	217.4	3,244.2	1,834.1	1,519.4
1958	54.0	1,074	1,859	291.3	1,389.0	183.0	216.1	449.9	241.4	3,457.4	2,025.5	1,698.1
1959	54.9	1,088	1,941	322.4	1,471.6	191.3	221.5	469.1	263.4	3,685.2	2,216.8	1,895.8
1960	56.7	1,132	2,173	360.3	1,700.4	216.7	237.7	520.1	298.2	4,161.1	2,443.2	2,129.2
1961	57.8	1,145	2,289	366.1	1,795.9	213.6	247.2	542.5	318.6	4,349.8	2,785.6	2,389.1
1962	58.5	1,121	2,287	364.3	1,770.3	211.2	252.4	495.5	326.9	4,394.6	3,052.1	2,809.6
1963	59.1	1,168	2,447	411.4	1,954.7	233.8	266.3	636.9	350.9	4,795.2	3,286.5	3,006.8
1964	59.4	1,210	2,652	449.5	2,174.0	252.5	281.4	700.5	379.7	5,270.0	3,480.7	3,204.7
1965	61.0	1,269	2,994	504.8	2,486.1	279.6	302.3	757.1	426.9	5,896.8	3,766.3	3,505.9
1966	61.7	1,294	3,163	542.7	2,647.8	282.8	319.0	818.3	459.5	6,251.9	4,154.7	3,776.6
1967	62.5	1,309	3,408	627.6	2,912.9	303.1	341.5	892.3	503.3	6,877.0	4,708.8	4,064.2
1968	63.0	1,331	3,666	687.0	3,163.6	315.0	360.1	937.5	549.0	7,430.9	4,962.2	4,303.2

(*a*) Excludes Northern Territory and Australian Capital Territory before 1 July 1964. (*b*) Average over whole year; includes working proprietors. (*c*) Excludes amounts drawn by working proprietors. (*d*) Value added in process of manufacture (i.e. value of output less value of materials and fuel used). (*e*) Depreciated or book value at end of year, including estimated value of rented premises and machinery. (*f*) Year ended previous December. (*g*) Owing to variation in classification, effective comparison is not possible.

PRIMARY AND SECONDARY INDUSTRIES

NET VALUE OF PRODUCTION OF PRIMARY INDUSTRIES AND FACTORIES(*a*)

Year ended 30 June—	Agriculture	Pastoral	Dairying	Poultry	Bee-farming	Total rural	Trapping	Forestry
	$m	$m	$m	$m	$m	$m	$m	$m
1902	47.6	54.4	15.2	4.0	0.2	121.4	n.a.	(*b*)5.6
1912	77.6	105.4	32.2	8.0	0.2	223.4	n.a.	9.6
1922	163.8	150.2	70.6	18.0	0.2	402.8	n.a.	18.2
1932	99.4	86.0	45.2	11.4	0.2	242.2	3.0	7.8
1942	128.0	170.8	68.6	13.0	0.8	381.2	10.0	20.4
1943	161.2	202.0	84.8	21.1	0.7	469.8	7.1	21.6
1944	165.3	216.8	89.7	25.4	0.8	498.1	13.4	23.0
1945	140.7	196.9	92.4	29.6	1.0	460.6	12.4	23.1
1946	219.1	172.6	99.1	30.3	0.8	521.8	17.1	25.1
1947	206.5	260.4	99.7	29.4	1.7	597.7	18.8	29.4
1948	451.6	387.7	121.1	33.5	1.5	995.4	14.6	35.5
1949	328.7	481.7	135.1	40.4	3.0	989.0	15.6	40.6
1950	437.4	674.2	162.2	44.5	1.5	1,319.8	11.4	46.4
1951	416.3	1,409.6	178.7	49.2	1.7	2,055.5	13.3	56.9
1952	493.4	801.0	207.6	63.1	1.5	1,566.6	13.4	75.8
1953	552.8	987.5	271.5	70.4	2.1	1,884.3	11.2	80.1
1954	536.9	983.4	273.9	69.6	2.9	1,866.7	10.1	88.0
1955	487.8	922.9	271.6	59.6	2.8	1,744.7	9.9	93.2
1956	558.9	893.6	309.8	60.4	3.5	1,826.2	12.1	103.6
1957	509.7	1,195.4	281.6	56.8	4.5	2,048.0	12.0	108.3
1958	489.1	894.5	255.2	54.7	3.1	1,696.6	12.1	106.9
1959	657.9	887.2	283.9	54.7	3.2	1,886.9	12.7	108.7
1960	583.9	1,072.4	304.4	60.8	4.1	2,025.7	13.8	105.5
1961	783.7	916.3	284.3	62.0	2.9	2,049.2	13.2	102.4
1962	733.0	962.7	273.0	49.7	3.2	2,021.6	11.8	95.2
1963	830.4	1,078.7	307.4	52.8	3.0	2,272.3	11.4	96.1
1964	917.4	1,340.6	330.2	61.5	5.1	2,654.8	13.4	99.1
1965	975.2	1,221.3	360.7	50.9	4.1	2.612.2	13.1	107.4
1966	857.9	1,188.5	349.9	62.6	3.5	2,462.5	13.8	111.0
1967	1,209.0	1,181.8	371.9	69.9	3.3	2,836.0	11.9	108.9
1968	899.9	1,044.4	371.3	57.1	3.8	2,376.5	10.5	111.4

(*a*) Gross value, 1901 to 1921–22. Before 1922, year ended previous December. (*b*) Includes Fisheries.

PRIMARY AND SECONDARY INDUSTRIES—*continued*

BUILDING

NET VALUE OF PRODUCTION OF PRIMARY INDUSTRIES AND FACTORIES(*a*)—*continued*

NEW HOUSES AND FLATS COMPLETED(*b*)

Year ended 30 June—	*Fisheries*	*Mining and quarrying (c)*	*Total, non-rural*	*Total, primary*	*Factories*	*Grand total*	NEW HOUSES AND FLATS COMPLETED(*b*) *Number*	NEW HOUSES AND FLATS COMPLETED(*b*) *Value*
	$m	$m	$m	$m	$m	$m	'000	$m
1902	(*d*)	44.0	49.6	171.0	(*c*)58.2	229.2	n.a.	n.a.
1912	2.2	46.6	58.4	281.8	(*c*)108.3	390.1	n.a.	n.a.
1922	2.8	40.0	61.0	463.8	225.0	688.8	n.a.	n.a.
1932	2.8	27.0	40.6	282.8	222.0	504.8	n.a.	n.a.
1942	3.6	66.8	100.8	482.0	633.0	1,115.0	n.a.	n.a.
1943	3.9	61.5	94.1	563.8	704.0	1,267.8	n.a.	n.a.
1944	3.9	55.2	95.5	593.6	732.5	1,326.0	n.a.	n.a.
1945	4.5	53.7	93.6	554.2	724.6	1,278.8	n.a.	n.a.
1946	5.2	52.5	99.9	621.7	704.6	1,326.4	15.4	29.0
1947	6.6	65.0	119.7	717.4	821.7	1,539.2	32.9	72.1
1948	7.0	85.2	142.3	1,137.7	978.6	2,116.3	44.3	108.6
1949	8.3	96.7	161.2	1,150.2	1,137.5	2,287.7	52.7	150.9
1950	8.5	104.7	170.9	1,490.7	1,323.1	2,813.8	57.0	184.7
1951	9.7	142.3	222.2	2,277.6	1,687.7	3,965.4	69.3	255.6
1952	11.5	194.4	295.1	1,861.7	2,049.7	3,911.4	80.1	354.1
1953	13.8	219.3	324.5	2,208.8	2,165.7	4,374.5	80.2	394.5
1954	15.5	209.8	323.4	2,190.1	2,454.1	4,644.2	77.6	398.2
1955	17.5	236.2	356.7	2,101.5	2,731.0	4,832.5	82.1	444.2
1956	17.8	265.0	398.5	2,224.7	3,001.4	5,226.1	78.5	452.5
1957	21.0	280.0	421.3	2,469.2	3,244.2	5,713.5	68.4	419.5
1958	20.8	253.6	393.4	2,090.0	3,457.4	5,547.4	74.6	463.0
1959	22.5	236.7	380.6	2,267.5	3,685.2	5,952.7	84.2	527.3
1960	24.7	252.3	396.2	2,421.9	4,161.1	6,583.0	90.0	571.0
1961	25.6	278.1	419.3	2,468.5	4,349.8	6,818.4	94.5	627.4
1962	28.6	274.5	410.1	2,431.7	4,394.6	6,826.4	86.3	593.2
1963	30.6	291.0	429.2	2,701.5	4,795.2	7,496.7	87.7	610.2
1964	31.7	327.7	471.8	3,126.6	5,270.0	8,396.6	96.7	685.8
1965	38.7	400.1	559.3	3,171.5	5,896.8	9,068.3	112.7	823.0
1966	41.7	443.9	610.4	3,072.9	6,251.9	9,324.8	112.8	869.9
1967	44.6	515.5	681.0	3,517.0	6,877.0	10,394.0	111.9	914.8
1968	54.3	568.1	744.3	3,120.9	7,430.9	10,551.7	120.2	1,022.8

(*a*) Gross value, 1901 to 1921–22. Before 1922, year ended previous December. (*b*) Series commenced 1945–46. Partly estimated before July 1951, and excludes Northern Territory before July 1954. (*c*) Year ended previous December. (*d*) Included in Forestry

WAGES AND PRICES

Year ended 31 December—	*Weekly wage rates index adult males(a)*	*Retail price index numbers, six State capital cities combined(b)*
1901	n.a.	88
1911	n.a.	100
1921	n.a.	(*c*)168
1931	n.a.	145
1941	38.5	167
1942	41.6	181
1943	42.5	188
1944	42.6	187
1945	42.7	187
1946	45.7	190
1947	49.8	198
1948	55.4	218
1949	59.7	240
1950	71.5	262
1951	85.8	313
1952	96.7	367
1953	99.2	383
1954	101.6	386
1955	105.2	394
1956	110.8	419
1957	112.4	429
1958	114.3	435
1959	122.0	443
1960	125.7	459
1961	129.5	471
1962	129.8	469
1963	133.0	472
1964	140.4	483
1965	144.3	502
1966	152.4	517
1967	159.3	534
1968	173.2	548

(*a*) At 31 December. Base: year 1954 = 100, weighted average. Excludes rural industry. (*b*) Base: year 1911 = 100. The index numbers are presented as a continuous series, but they give only a broad indication of long-term trends in retail price levels. They are derived by linking a number of indexes that differ greatly in scope. The successive indexes used are: from 1901 to 1914, the 'A' Series Retail Price Index; from 1914 to 1946–47, the 'C' Series Retail Price Index; from 1946–47 to 1948–49, a composite of Consumer Price Index Housing Group (partly estimated) and 'C' Series Index excluding Rent; and from 1948–49 onwards, the Consumer Price Index. (*c*) November.

OVERSEAS TRADE

TOTALS PRINCIPAL EXPORTS(*a*)

Year ended 30 June—	*Imports*	*Exports*	*Wool*		*Wheat*		*Flour(b)*	
			Quantity	*Value*	*Quantity*	*Value*	*Quantity*	*Value*
	$m f.o.b.	$m f.o.b.	mil lb(*c*)	$m f.o.b.	'000 tons	$m f.o.b.	'000 short tons	$m f.o.b.
1902(*d*)	76	100	387.5	30	543	5.6	97	1.2
1912(*d*)	122	158	728.1	52	873	12.8	176	2.8
1922	188	256	971.3	96	2,677	57.2	360	11.0
1932	104	216	941.6	74	3,413	38.4	611	7.6
1942	348	338	939.8	112	598	9.2	414	8.4
1943	492	251	628.6	84	604	9.7	342	7.0
1944	489	293	598.6	85	902	16.5	591	13.4
1945	430	311	683.5	92	868	19.5	560	13.5
1946	358	447	930.9	132	334	12.4	519	22.7
1947	419	618	1,454.6	244	326	12.7	765	45.1
1948	679	820	1,132.9	289	1,612	105.6	784	63.6
1949	830	1,085	1,324.9	454	2,224	129.4	855	67.4
1950	1,076	1,227	1,427.4	618	2,101	124.3	771	52.7
1951	1,488	1,964	1,193.7	1,253	2,309	148.3	883	65.8
1952	2,107	1,350	1,041.3	636	1,685	110.6	789	66.0
1953	1,028	1,743	1,207.7	788	1,594	103.9	870	74.8
1954	1,363	1,657	1,206.0	805	966	61.9	761	59.4
1955	1,687	1,548	1,182.8	693	1,691	90.4	656	40.6
1956	1,642	1,564	1,295.8	653	1,903	92.9	667	39.4
1957	1,438	1,986	1,450.8	930	2,440	120.1	750	43.3
1958	1,584	1,636	1,329.7	720	1,060	57.0	460	28.7
1959	1,593	1,623	1,448.7	578	1,463	76.8	447	26.7
1960	1,854	1,875	1,592.6	742	2,444	123.4	536	30.3
1961	2,175	1,938	1,557.7	649	4,098	204.9	658	38.0
1962	1,769	2,155	1,628.7	720	5,442	284.9	579	34.8
1963	2,163	2,152	1,594.3	733	4,071	216.9	524	31.4
1964	2,373	2,782	1,669.6	926	6,796	362.0	685	42.2
1965	2,905	2,651	1,605.3	781	5,624	297.2	572	37.3
1966	2,939	2,721	1,601.5	757	5,075	264.1	390	24.8
1967	3,045	3,024	1,625.6	840	6,403	361.2	357	23.1
1968	3,264	3,045	1,673.6	739	6,396	342.7	381	23.5
1969	3,469	3,374		827	4,814	258.3	350	21.8

(*a*) Australian produce. (*b*) Flour, plain white. (*c*) Greasy equivalent (includes greasy wool, slipe, wool scoured and carbonised, wool exported on skins). (*d*) Year ended previous December. (*e*) Estimated.

PRINCIPAL EXPORTS(*a*)—*continued*

Year ended 30 June—	*Butter(b)*		*Hides and skins*	*Meats(c)*	*Fruit(d)*	*Sugar*	*Gold*	*Ores and concentrates*	
								Iron	*Other(e)*
	Quantity	*Value*	*Value*	*Value*	*Value*	*Value*	*Value*	*Value*	*Value*
	mil lb	$m f.o.b.	$m f.o.b.	$m f.o.b.	$m f.o.b.	$m f.o.b.	$m f.o.b.	$m f.o.b.	$m f.o.b.
1902(*f*)	35	2.8	2.6	5.2	0.4	(*g*)	28.6	..	(*g*)
1912(*f*)	102	9.2	6.4	8.6	1.0	(*g*)	24.0	..	8.1
1922	127	16.0	6.2	11.0	6.0	(*g*)	7.0	..	1.3
1932	202	20.6	4.6	12.8	9.6	5.0	23.8	..	0.3
1942	130	16.2	12.0	28.2	10.6	5.2	18.4	..	1.9
1943	130	17.1	7.4	21.2	7.0	2.0	(*g*)	..	2.5
1944	105	13.8	13.5	26.1	10.2	3.0	(*g*)	..	3.1
1945	94	16.5	13.2	28.2	11.0	3.7	(*g*)	..	3.4
1946	139	24.8	23.7	28.0	12.2	6.1	52.8	..	3.2
1947	135	25.4	30.9	42.3	19.7	5.4	(*g*)	..	5.6
1948	187	41.8	24.7	45.1	25.5	6.1	7.7	..	9.2
1949	185	48.3	24.4	59.5	30.3	26.4	(*g*)	..	11.8
1950	182	50.8	30.3	70.0	30.2	28.3	(*g*)	..	12.3
1951	123	37.8	54.4	60.8	37.6	29.6	(*g*)	..	21.4
1952	28	10.2	34.3	71.0	44.4	13.8	14.0	..	39.9
1953	112	40.9	40.3	131.6	61.2	43.3	40.8	..	38.9
1954	90	33.1	38.9	113.8	67.9	63.2	27.5	..	25.6
1955	142	50.0	39.4	127.0	68.0	62.3	27.4	..	28.1
1956	186	58.7	41.8	119.1	67.4	49.4	16.6	..	38.2
1957	173	52.9	48.5	100.1	52.9	57.6	28.5	..	51.4
1958	116	32.3	50.8	110.5	72.0	70.0	12.7	..	42.4
1959	176	50.9	47.1	194.4	73.1	64.3	6.6	..	32.7
1960	175	58.4	63.6	177.0	64.3	53.3	20.4	..	43.5
1961	141	40.9	54.4	144.6	61.1	70.1	79.9	..	54.4
1962	178	48.5	64.3	179.4	73.5	67.8	18.0	..	47.7
1963	179	49.3	73.7	225.7	73.3	91.0	12.9	..	43.5
1964	202	57.0	91.7	243.7	92.3	156.5	14.3	..	54.4
1965	214	67.4	80.1	286.2	86.1	112.7	18.4	0.8	76.6
1966	186	57.7	89.2	287.7	107.3	93.9	24.4	2.7	87.5
1967	230	64.8	85.5	285.5	94.5	99.5	18.1	46.0	101.0
1968	172	47.0	61.9	284.6	104.6	97.6	15.6	103.0	123.1
1969	166	40.5	75.0	290.9	92.4	122.2	22.7	179.5	143.3

(*a*) Australian produce. (*b*) Includes concentrates and ghee. (*c*) Includes sausage casings, natural. (*d*) Includes juices and fruit preparations. (*e*) Excludes iron ore and iron ore concentrates. (*f*) Year ended previous December. (*g*) Less than 0.05.

OVERSEAS TRADE—*continued*

PRINCIPAL IMPORTS

Year ended 30 June—	*Vegetable foodstuffs, etc.*	*Apparel, etc.*	*Oil, etc.*	*Metals, etc.*	*Rubber*	*Paper, etc.*
	$m f.o.b.	$m f.o.b.	$m f.o.b.	$m f.o.b.	$m f.o.b.	$m f.o.b.
1902(*a*)	7.2	21.8	2.4	15.6	1.0	3.2
1912(*a*)	7.4	32.4	3.2	28.0	2.8	5.2
1922	8.0	62.0	9.4	45.6	3.4	8.8
1932	5.2	30.8	11.0	14.8	1.6	8.8
1942	12.3	65.3	32.4	143.6	6.0	8.7
1943	14.5	59.0	35.0	203.1	4.4	4.7
1944	10.5	77.2	47.5	215.4	6.0	11.8
1945	13.0	90.7	41.3	150.4	3.5	14.8
1946	17.6	63.4	41.5	92.5	5.9	16.3
1947	18.9	97.8	41.3	105.2	10.9	26.8
1948	33.0	192.1	69.5	170.8	9.8	46.8
1949	27.9	218.4	86.4	256.1	12.6	42.1
1950	41.4	199.5	104.8	454.7	21.4	37.8
1951	49.6	277.3	139.7	479.7	59.3	58.0
1952	50.1	407.1	174.9	786.8	68.0	137.5
1953	37.0	96.5	148.5	452.0	17.4	44.9
1954	51.4	227.6	167.0	504.4	23.7	68.2
1955	71.9	253.5	193.8	638.3	34.1	92.8
1956	44.1	222.7	199.3	644.1	44.1	87.2
1957	51.6	182.7	191.1	530.1	33.4	83.5
1958	51.5	217.0	203.4	564.4	33.3	89.8
1959	55.3	193.9	209.0	585.6	33.6	96.1
1960	54.9	222.1	213.5	710.1	48.5	103.8
1961	60.5	264.9	223.3	871.3	47.3	133.8
1962	56.3	208.4	219.8	630.3	35.5	109.6
1963	55.5	233.3	246.3	850.0	46.7	133.5
1964	61.6	234.0	251.5	947.1	51.2	141.7
1965	66.2	272.1	260.0	1,275.2	66.3	156.5

ar led 30 June—	*Food and live animals*	*Beverages and tobacco*	*Crude materials, inedible, except fuels*	*Mineral fuels, lubricants and related materials*	*Animal and vegetable oils and fats*	*Chemicals*	*Manufactured goods classified chiefly by material*	*Machinery and transport equipment*	*Miscellaneous manufactured articles*	*Commodities and transactions of merchandise trade not elsewhere classified*
	$m f.o.b.	$m f.o.b.	$m f.o.b.	$m f.o.b.	$m f.o.b.	$m f.o.b.	$m f.o.b.	$m f.o.b.	$m f.o.b.	$m f.o.b.
6	110	37	197	252	15	266	590	1,121	220	89
7	118	38	206	247	15	297	586	1,144	243	110
8	117	36	224	241	14	309	644	1,250	270	110
9	128	44	228	252	13	328	688	1,328	298	116

(*a*) Year ended previous December.

TRANSPORT AND COMMUNICATION

SHIPPING

Year ended 30 June—	Overseas vessels				Overseas cargo		Interstate vessels—entrances		Interstate cargo shipped
	Entrances		Clearances						
	No.	Net tonnage	No.	Net tonnage	Dis-charged	Shipped	No.	Net tonnage	
		mil tons		mil tons	mil tons (a)	mil tons (a)		mil tons	mil tons (a)
1902	(b)	(b)	(b)	(b)	n.a.	n.a.	n.a.	n.a.	n.a.
1912	(c)2,081	(c)5.0	(c)2,093	(c)5.0	n.a.	n.a.	(c)5,000	(c)6.8	n.a.
1922	1,567	4.6	1,544	4.5	2.4	5.8	4,897	6.4	5.5
1932	1,519	5.7	1,538	5.7	3.0	6.7	3,958	5.5	4.0
1942	1,276	5.2	1,268	5.6	5.5	4.2	4,860	6.6	10.0
1943	956	3.8	1,069	4.3	5.1	3.6	3,596	4.6	9.4
1944	1,094	4.5	1,286	5.2	5.9	5.1	3,731	5.2	9.2
1945	1,059	4.5	1,088	4.6	6.1	4.9	3,543	5.1	9.3
1946	1,146	5.3	1,225	5.4	6.2	3.9	3,108	4.4	7.4
1947	1,202	5.2	1,287	5.2	5.6	4.5	3,084	4.7	8.5
1948	1,470	6.1	1,479	5.8	6.9	5.8	2,943	4.2	8.4
1949	1,706	7.5	1,780	7.5	8.4	6.8	3,091	4.7	7.4
1950	1,942	8.7	1,965	8.7	11.3	6.4	3,228	5.3	7.6
1951	1,911	8.6	1,992	8.7	13.1	6.7	3,301	5.8	8.0
1952	2,038	9.0	2,098	9.3	14.4	5.7	3,750	7.9	9.0
1953	1,988	8.7	2,053	8.9	9.7	7.5	4,555	9.2	9.7
1954	2,054	8.9	2,073	8.9	11.3	7.1	4,759	9.6	10.6
1955	2,245	9.9	2,260	10.1	14.4	7.5	4,644	9.4	11.7
1956	2,425	11.2	2,457	11.1	15.9	8.2	4,626	9.5	12.9
1957	2,628	11.8	2,662	11.8	15.3	10.1	4,805	9.5	13.2
1958	2,656	12.4	2,598	12.1	16.6	8.9	5,127	9.8	13.8
1959	2,706	12.9	2,757	13.1	16.9	10.1	5,012	9.5	13.4
1960	2,976	14.5	2,969	14.4	18.7	11.6	5,004	9.5	14.3
1961	3,382	17.3	3,396	17.0	21.1	15.3	4,860	9.6	15.2
1962	3,599	18.9	3,611	18.8	20.3	18.7	5,032	9.8	14.8
1963	3,411	19.0	3,351	18.6	22.8	17.0	4,845	9.7	15.4
1964	3,714	20.7	3,763	20.9	24.7	21.6	5,067	10.1	16.8
1965	3,813	21.7	3,788	21.7	27.7	22.4	5,263	13.2	17.8
1966	3,929	23.0	4,029	23.3	28.3	23.8	5,480	15.1	17.7
1967	3,977	27.4	4,017	27.6	31.3	34.6	4,937	15.3	17.4
1968	3,972	30.1	4,013	30.3	32.3	43.4	5,159	15.7	19.0

(a) Tons weight plus tons measurement. (b) Separate details not available. Total entrances and clearances for year ended December 1901, 4,028 vessels, 6.5 million tons. (c) Year ended previous December.

GOVERNMENT RAILWAYS(a)

Year ended 30 June—	Route-miles (b)	Train mileage	Pas-senger journeys	Freight–tons carried	Freight–net ton-miles
	'000	mil	mil	mil	mil
1902	12.8	38.2	115	15.5	n.a.
1912	16.8	55.2	228	25.5	n.a.
1922	23.4	56.1	335	31.5	n.a.
1932	27.0	63.8	303	26.1	n.a.
1942	27.2	88.5	475	38.9	n.a.
1943	27.2	96.1	518	42.5	n.a.
1944	27.2	91.8	533	42.0	n.a.
1945	27.2	90.2	535	40.8	n.a.
1946	27.2	86.7	546	36.7	n.a.
1947	27.2	85.5	503	37.8	5,605
1948	27.1	87.7	511	40.0	5,934
1949	27.0	92.3	507	41.4	6,212
1950	27.0	93.4	505	40.6	6,203
1951	27.0	88.7	476	40.9	6,277
1952	26.8	93.4	501	44.3	6,755
1953	26.8	88.7	498	44.0	6,574
1954	26.6	93.5	511	46.8	6,953
1955	26.6	94.8	517	47.7	7,295
1956	26.5	96.2	515	46.8	7,274
1957	26.5	95.1	499	47.5	7,463
1958	26.4	90.3	494	45.3	6,808
1959	26.3	91.3	485	48.0	7,320
1960	26.2	92.7	479	51.2	8,006
1961	26.1	93.0	463	55.4	8,788
1962	25.6	92.6	461	55.6	8,823
1963	25.5	92.9	465	55.9	9,253
1964	25.2	96.5	471	61.7	10,501
1965	25.0	96.6	464	64.8	11,145
1966	25.0	94.3	460	64.4	11,038
1967	25.1	93.7	455	68.5	11,517
1968	25.1	94.5	453	71.1	12,264

REGULAR INTERNAL AIR SERVICES

Year ended 30 June—	Miles flown	Passengers		Freight		Mail	
		Embark-ations	Pas-senger miles	Tons up-lifted	Ton-miles	Tons up-lifted	Ton-miles
	mil	'000	mil	'000(c)	mil(d)	'000(c)	mil(d)
1902	..	..	..	..	..	..	..
1912	..	..	..	..	..	..	..
1922	..	..	..	..	..	..	..
1932	0.9	6	3	0.04	n.a.	0.02	n.a.
1942	7.8	151	76	1.3	1.0	n.a.	0.5
1943	7.0	135	64	1.1	0.9	2.3	1.5
1944	9.7	216	100	1.5	0.9	3.6	2.7
1945	12.6	320	141	2.6	1.3	4.2	2.8
1946	17.7	509	225	5.6	2.6	2.4	1.7
1947	23.0	850	366	13.7	6.7	1.3	0.7
1948	32.4	1,208	503	28.9	13.4	1.4	0.8
1949	35.2	1,409	566	37.4	17.1	1.8	0.9
1950	36.5	1,500	590	49.4	22.3	2.9	1.4
1951	40.7	1,685	669	59.4	27.1	3.2	1.5
1952	41.8	1,829	722	57.5	26.7	2.7	1.3
1953	39.1	1,706	667	57.6	27.2	2.3	1.2
1954	41.0	1,772	702	69.5	32.7	2.3	1.2
1955	43.5	1,918	766	78.7	37.0	2.3	1.3
1956	43.7	2,020	828	84.4	38.9	2.5	1.4
1957	42.1	2,125	891	75.1	36.3	2.5	1.4
1958	40.5	2,123	899	70.0	33.0	2.6	1.4
1959	40.3	2,235	944	62.8	28.8	2.7	1.5
1960	42.3	2,660	1,133	65.4	29.2	4.8	2.6
1961	43.2	2,639	1,110	63.0	28.2	6.0	3.1
1962	41.2	2,666	1,119	57.2	26.1	6.3	3.2
1963	43.7	2,833	1,221	59.4	28.3	6.5	3.3
1964	49.0	3,257	1,408	63.2	30.5	7.1	3.7
1965	52.3	3,764	1,639	70.0	33.9	7.7	4.1
1966	55.0	4,158	1,831	76.1	37.6	8.6	4.6
1967	56.8	4,425	1,972	82.1	40.1	9.6	5.1
1968	56.7	4,668	2,125	85.1	42.3	9.4	5.2

(a) Particulars of train-mileages, passenger-journeys, freight tons carried, and freight net ton-miles refer only to operations for which revenue is received. (b) At end of period. (c) Short tons (2000 lb). (d) In terms of short tons.

TRANSPORT AND COMMUNICATION—*continued*

ROAD TRANSPORT | COMMUNICATION

Year ended 30 June—	*Tramway, trolley-bus and omnibus services(a)*	*Motor vehicles on the register(b)*			*Postal matter dealt with(c)*	*Telephones*		*Tele-grams(e)*	*Broadcasting and television licences in force(b)*	
	Passenger journeys	*Motor cars and station wagons*	*Utilities, panel vans, etc, trucks and omnibuses*	*Total motor vehicles (excluding motor cycles)*		*Instru-ments in service(b)*	*Services in operation (b)(d)*		*Broadcast listeners'*	*Television viewers'*
	mil	'000	'000	'000	mil articles	'000	'000	mil	'000	'000
1902 .	n.a.	..	..	..	(*f*)384	(*f*)36	(*f*)28	(*f*)8.2	..	..
1912 .	360	n.a.	n.a.	n.a.	(*f*)698	(*f*)118	(*f*)96	(*f*)13.9	..	..
1922 .	569	102		102	778	259	196	16.8	(*g*) 1	..
1932 .	589	420	96	516	887	485	364	13.9	369	..
1942 .	(*h*)1,067	451	251	701	1,124	739	531	26.1	1,320	..
1943 .	1,189	472	256	728	1,082	767	540	32.5	1,370	..
1944 .	1,281	493	274	768	1,114	800	557	35.8	1,395	..
1945 .	1,290	506	291	798	1,155	828	578	37.6	1,415	..
1946 .	1,275	522	330	852	1,166	856	608	38.0	1,437	..
1947 .	1,216	550	376	926	1,235	905	648	35.7	1,678	..
1948 .	1,199	593	412	1,007	1,307	963	688	36.8	1,704	..
1949 .	1,185	650	455	1,105	1.375	1,028	734	37.9	1,763	..
1950 .	1,076	763	504	1,267	1,466	1,110	795	38.0	1,841	..
1951 .	1,092	878	553	1,431	1,526	1,209	870	37.2	1,885	..
1952 .	1,019	1,026	585	1,611	1,482	1,301	939	29.8	1,961	..
1953 .	988	1,103	584	1,687	1,506	1,383	1,001	25.9	1,986	..
1954 .	981	1,195	612	1,807	1,604	1,476	1,070	25.1	2,042	..
1955 .	966	1,342	655	1,997	1,653	1,587	1,153	25.5	2,035	..
1956 .	927	1,430	693	2,123	1,741	1,704	1,240	25.4	2,089	..
1957 .	833	1,537	710	2,248	1,784	1,814	1,318	24.0	2,107	74
1958 .	803	1,661	731	2,392	1,895	1,937	1,407	22.9	2,138	291
1959 .	778	1,784	755	2,539	1,951	2,056	1,491	22.5	2,264	578
1960 .	758	1,938	784	2,722	1,953	2,164	1,562	22.2	2,283	955
1961 .	726	2,070	800	2,870	2,048	2,266	1,631	21.8	2,256	1,217
1962 .	718	2,201	815	3,015	2,101	2,382	1,719	21.6	2,220	1,424
1963 .	712	2,381	833	3,214	2.202	2,523	1,812	21.8	2,240	1,655
1964 .	703	2,595	851	3,445	2,342	2,670	1,919	23.4	2,302	1,882
1965 .	685	2,811	865	3,676	2,443	2,811	2,010	24.3	2,358	2,045
1966 .	653	2,975	878	3,852	2,556	2,978	2,120	25.0	2,526	2,226
1967 .	621	3,140	893	4,033	2,683	3,178	2,235	25.6	2,538	2,405
1968 .	609	3,349	907	4,256	2,648	3,392	2,359	(*i*)23.4	2,580	2,519

(*a*) Government and municipal. (*b*) At end of period. (*c*) Letters, postcards, letter-cards, newspapers, packets, parcels, and registered articles. (*d*) All single lines plus one half the number of duplex lines. Until the introduction of duplex services in December 1948, statistics of exchange lines and telephone services were identical. (*e*) Telegrams despatched to places within Australia and despatched to or received from overseas. (*f*) Year ended previous December. (*g*) Year 1923–24. First year licences issued. (*h*) Tramway passenger journeys only before 1942. (*i*) Excludes telegrams received from overseas. These particulars are no longer available.

NATIONAL ACCOUNTS

	GROSS NATIONAL PRODUCT					GROSS FIXED CAPITAL EXPENDITURE			
	At current prices			*At constant prices(a)*		*At current prices*		*At constant prices*	
Year	(*b*)	(*c*)	(*d*)	*1953–54 prices(d)*	*1959–60 prices(d)*	(*e*)	(*d*)	*1953–54 prices(d)*	*1959–60 prices(d)*
	$m	$m	$m	$m	$m	$m	$m	$m	$m
1900–01	419	..	..	..	..	56	..	..	..
1901–02	444	..	..	..	..	74	..	..	..
1902–03	428	..	..	..	..	65	..	..	..
1903–04	449	..	..	..	..	51	..	..	..
1904–05	445	..	..	..	..	50	..	..	..
1905–06	478	..	..	..	..	53	..	..	..
1906–07	538	..	..	..	..	72	..	..	..
1907–08	536	..	..	..	..	75	..	..	..
1908–09	583	..	..	..	..	76	..	..	..
1909–10	624	..	..	..	..	80	..	..	..
1910–11	683	..	..	..	..	98	..	..	..
1911–12	733	..	..	..	..	125	..	..	..
1912–13	802	..	..	..	..	146	..	..	..
1913–14	865	..	..	..	..	154	..	..	..
1914–15	833	..	..	..	..	132	..	..	..
1915–16	909	..	..	..	..	125	..	..	..
1916–17	943	..	..	..	..	123	..	..	..
1917–18	963	..	..	..	..	112	..	..	..
1918–19	1,089	..	..	..	..	146	..	..	..
1919–20	1,257	..	..	..	..	209	..	..	..
1920–21	1,426	..	..	..	..	245	..	..	..
1921–22	1,378	..	..	..	..	261	..	..	..
1922–23	1,510	..	..	..	..	273	..	..	..
1923–24	1,569	..	..	..	..	290	..	..	..
1924–25	1,722	..	..	..	..	303	..	..	..
1925–26	1,659	..	..	..	..	308	..	..	..
1926–27	1,729	..	..	..	..	328	..	..	..
1927–28	1,739	..	..	..	..	329	..	..	..
1928–29	1,711	..	..	..	..	309	..	..	..
1929–30	1,566	..	..	..	..	240	..	..	..
1930–31	1,288	..	..	..	..	166	..	..	..
1931–32	1,209	..	..	..	..	119	..	..	..
1932–33	1,264	..	..	..	..	134	..	..	..
1933–34	1,356	..	..	..	..	156	..	..	..
1934–35	1,422	..	..	..	..	203	..	..	..
1935–36	1,574	..	..	..	..	226	..	..	..
1936–37	1,717	..	..	..	..	253	..	..	..
1937–38	1,857	..	..	..	..	306	..	..	..
1938–39	1,847	1,860	(1,800)	..	..	298	(316)	..	..
1939–40	..	2,040	..	..	..	..	..	..	..
1940–41	..	2,174	..	..	..	..	..	..	..
1941–42	..	2,548	..	..	..	..	..	..	..
1942–43	..	2,936	..	..	..	..	..	..	..
1943–44	..	2,986	..	..	..	..	..	..	..
1944–45	..	2,906	..	..	..	..	..	..	..
1945–46	..	3,006	..	..	..	..	..	..	..
1946–47	..	3,234	..	..	..	..	..	..	..
1947–48	..	3,988	..	..	..	..	..	..	..
1948–49	..	4,524	4,479	7,368	..	..	788	1,346	..
1949–50	..	..	5,367	7,916	..	..	1,054	1,640	..
1950–51	..	..	7,193	8,376	..	..	1,509	2,033	..
1951–52	..	..	7,706	8,597	..	..	1,939	2,195	..
1952–53	..	..	8,372	8,522	..	..	1,927	1,972	..
1953–54	..	..	9,047	9,063	10,526	..	2,137	2,137	2,521
1954–55	..	..	9,766	9,552	11,154	..	2,352	2,292	2,698
1955–56	..	..	10,600	10,083	11,706	..	2,557	2,370	2,803
1956–57	..	..	11,490	10,341	11,938	..	2,669	2,380	2,821
1957–58	..	..	11,628	10,478	12,182	..	2,857	2,499	2,953
1958–59	..	..	12,524	11,388	13,046	..	3,023	2,611	3,087
1959–60	..	..	13,886	11,833	13,599	..	3,394	2,875	3,394
1960–61	..	..	14,686	..	14,298	..	3,657	..	3,553
1961–62	..	..	14,999	..	14,395	..	3,713	..	3,543
1962–63	..	..	16,242	..	15,225	..	4,010	..	3,806
1963–64	..	..	18,001	..	16,232	..	4,506	..	4,201
1964–65	..	..	19,839	..	17,488	..	5,225	..	4,730
1965–66	..	..	20,840	..	17,654	..	5,666	..	4,985
1966–67	..	..	22,771	..	18,752	..	5,955	..	5,080
1967–68	..	..	24,187	..	19,398	..	6,492	..	5,396
1968–69p	..	..	27,114	..	21,077	..	7,199	..	5,782

(*a*) These series relate to gross national product after stock valuation adjustment, at constant prices (*see Australian National Accounts*, *op. cit.* pp. 15 and 101). (*b*) N. G. Butlin, *Australian Domestic Product, Investment and Foreign Borrowing* 1861—1938–39, Cambridge University Press, Cambridge, 1962. Gross domestic product excluding livestock accumulation, approximates conceptually gross national product as defined in the Australian National Accounts. (*c*) Published by the Commonwealth Statistician. Figures prior to 1948–49 are from *National Income and Expenditure* 1955–56 and are not strictly comparable with subsequent figures because of a number of definitional changes and statistical revisions; *see* pages 18–19, 117–20, *Australian National Accounts* 1948–49 *to* 1961–62, Commonwealth Bureau of Census and Statistics. (*d*) *Australian National Accounts* 1967–68, Commonwealth Bureau of Census and Statistics, and, for the last five years, the Budget Paper *National Income and Expenditure* 1968–69. The figures of $1,800m for gross national product and $316m for gross fixed capital expenditure in 1938–39 are based on a reconstruction of earlier estimates, and are approximately consistent with the present Australian National Account series. Mr B. D. Haig ('1938–39 National Income Estimates', *Australian Economic History Review*, Vol. vii, No. 2, September 1967) has adjusted components of gross national expenditure and imports and exports for changes in prices. If the price indexes implied by Mr Haig's estimates are used to revalue at 1938–39 prices gross national product and gross fixed capital expenditure for 1948–49, values of $2,384m and $434m, respectively, are obtained. (*e*) N. G. Butlin, *op. cit.* For a variety of reasons, Professor Butlin's gross domestic capital formation figures given here differ conceptually from those for gross fixed capital expenditure in the Australian National Accounts.

PRIVATE FINANCE

	NOTE ISSUE	BANKING			
		Cheque-paying banks			*Savings Banks*
Year ended 30 June—	*Commonwealth note issue(a)*	*Advances (b)*	*Deposits (b)*	*Bank clearings (c)*	*Depositors balances(d)*
	$m	$m	$m	$m	$m
1902	. .	188	186	13	62
1912	16	238	300	25	118
1922	107	364	578	65	308
1932	103	522	638	55	396
1942	205	648	965	142	549
1943	280	583	1,233	156	716
1944	382	542	1,389	158	943
1945	373	503	1,525	149	1,134
				Debits to customers' accounts(c)	
1946	400	519	1,397	(*e*)296	1,327
1947	405	672	1,445	349	1,320
1948	393	824	1,598	451	1,363
1949	426	966	1,830	514	1,428
1950	463	1,148	2,264	655	1,524
1951	551	1,357	2,826	897	1,675
1952	605	1,656	2,564	866	1,784
1953	657	1,450	2,856	877	1,895
1954	688	1,690	3,061	1,100	2,020
1955	726	1,982	3,089	1,127	2,145
1956	745	1,945	2,992	1,123	2,282
1957	763	1,897	3,231	1,250	2,455
1958	775	2,060	3,240	1,282	2,594
1959	790	2,007	3,362	1,432	2,783
1960	843	2,211	3,611	1,737	3,045
1961	839	2,238	3,600	1,654	3,155
1962	856	2,287	3,837	1,848	3,470
1963	869	2,465	4,064	2,028	3,940
1964	870	2,610	4,649	2,318	4,476
1965	862	2,955	5,038	2,653	4,887
1966	849	3,183	5,308	2,672	5,254
1967	938	3,548	5,614	2,978	5,765
1968	1,006	4,020	6,087	3,588	6,222
1969	1,107	4,384	6,706	4,055	6,707

(*a*) Last Wednesday in June. (*b*) June quarter up to and including 1945; month of June from 1946 onwards. (*c*) Weekly average, June month. (*d*) End of June. (*e*) Bank clearings, $179m.

LIFE INSURANCE(*a*)

	Ordinary(c)		*Industrial*		*Total*	
Year ended 31 December(b)—	*Policies*	*Sum assured*	*Policies*	*Sum assured*	*Policies*	*Sum assured*
	'000	$m	'000	$m	'000	$m
1901	414	216	236	10	650	226
1911	484	218	467	20	951	238
1921	730	362	973	60	1,703	422
1931	871	570	1,550	134	2,421	704
1941	1,340	926	2,780	254	4,120	1,180
1942	1,384	956	2,899	268	4,283	1,223
1943	1,433	998	3,026	285	4,459	1,284
1944	1,506	1,071	3,158	306	4,664	1,376
1945	1,587	1,157	3,279	327	4,866	1,484
1946	1,730	1,310	3,429	357	5,159	1,667
1947	1,902	1,481	3,541	386	5,442	1,867
1948	2,071	1,669	3,643	418	5,714	2,087
1949	2,224	1,862	3,725	448	5,949	2,310
1950	2,377	2,094	3,793	477	6,170	2,571
1951	2,554	2,424	3,843	507	6,396	2,931
1952	2,731	2,757	3,873	541	6,604	3,298
1953	2,893	3,105	3,881	571	6,774	3,677
1954	3,033	3,482	3,827	594	6,860	4,076
1955	3,184	3,942	3,766	615	6,949	4,556
1956	3,319	4,447	3,702	631	7,021	5,077
1957	3,446	5,067	3,615	645	7,061	5,712
1958	3,577	5,747	3,531	657	7,108	6,404
1959	3,710	6,571	3,443	665	7,154	7,236
1960	4,110	7,690	3,340	686	7,450	8,376
1961	4,201	8,743	3,199	707	7,400	9,450
1962	4,291	9,854	3,076	743	7,366	10,597
1963	4,401	11,010	2,953	777	7,354	11,787
1964	4,539	12,481	2,851	823	7,390	13,304
1965	4,705	14,057	2,755	871	7,460	14,928
1966	4,873	15,750	2,644	918	7,517	16,668
1967	5,051	17,762	2,603	981	7,654	18,743
1968	5,251	20,357	2,561	1,041	7,812	21,397

(*a*) Existing business in Australia. (*b*) Companies' financial years which ended during the year. (*c*) Includes superannuation business.

PUBLIC FINANCE

Year ended 30 June—	COMMONWEALTH				STATE				GOVERNMENT SECURITIES ON ISSUE(a)				
	Consolidated revenue fund		Net loan fund expenditure (b)	Taxation collections	Consolidated revenue fund		Net loan expenditure (b)	Taxation collections	Commonwealth	State	Total	Overseas	In Australia
	Revenue	Expenditure			Revenue	Expenditure							
	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m
1902	23	8	..	18	56	58	19	5	..	429	429	n.a.	n.a.
1912	41	29	2	32	83	82	33	11	12	557	569	388	181
1922	128	128	10	99	170	175	67	36	708	1,039	1,747	823	924
1932	143	143	8	108	199	242	12	65	692	1,800	2,492	1,320	1,172
1942	420	420	426	359	305	299	17	115	1,340	2,038	3,378	1,312	2,066
1943	589	589	806	514	337	333	8	53	2,117	2,013	4,131	1,308	2,823
1944	684	684	755	607	338	334	6	43	2,850	1,994	4,844	1,262	3,582
1945	754	754	532	676	338	334	12	44	3,355	2,008	5,364	1,231	4,133
1946	782	782	319	706	332	331	14	50	3,670	2,005	5,675	1,142	4,533
1947	863	863	98	771	346	350	48	57	3,733	2,044	5,777	1,130	4,647
1948	932	932	26	845	394	398	75	64	3,702	2,119	5,821	1,117	4,704
1949	1,109	1,109	−9	982	452	456	102	73	3,685	2,202	5,887	1,088	4,798
1950	1,161	1,161	85	1,038	521	525	147	83	3,731	2,367	6,098	1,099	4,999
1951	1,684	1,684	101	1,554	613	613	257	103	3,777	2,619	6,396	1,067	5,329
1952	2,034	2,034	63	1,868	777	783	395	126	3,838	2,993	6,830	1,113	5,717
1953	2,080	2,080	71	1,791	876	877	322	142	3,893	3,288	7,181	1,142	6,038
1954	2,046	2,046	83	1,801	941	935	335	161	3,964	3,573	7,537	1,165	6,372
1955	2,135	2,135	66	1,875	991	998	321	179	3.998	3,846	7,844	1,216	6,628
1956	2,277	2,277	88	2,008	1,052	1,082	312	196	4,031	4,121	8,151	1,269	6,882
1957	2,624	2,624	88	2,197	1,154	1,168	317	229	3.957	4,396	8,353	1,216	7,137
1958	2,648	2,648	90	2,323	1,210	1,224	314	256	3,670	4,686	8,356	1,248	7,108
1959	2,592	2,592	132	2,267	1,280	1,295	338	276	3.512	4,988	8,499	1,319	7,180
1960	2,877	2,877	119	2,500	1,399	1,404	357	320	3,334	5,301	8.635	1,389	7,246
1961	3,277	3,277	83	2,850	1,511	1,513	384	335	3,215	5,630	8,845	1,413	7,433
1962	3,282	3,283	182	2,833	1,609	1,617	395	353	3,119	5,963	9,082	1,424	7,658
1963	3,371	3,371	274	2,882	1,694	1,696	405	391	3,121	6,314	9,434	1,522	7,912
1964	3,809	3,809	226	3,220	1,829	1,829	438	447	3,172	6,691	9.863	1,545	8,318
1965	4,418	4,418	167	3,788	1,947	1,965	477	493	3,134	7,091	10,225	1,529	8,695
1966	4,879	4,879	(c)260	4,188	2,095	2,120	492	535	3,145	7,495	10,639	1,505	9 134
1967	5,228	5,228	(c)450	4,456	2,286	2,290	515	602	3,275	7,934	11,209	1,532	9,677
1968	5,760	5,760	(c)655	4,917	2,463	2,469	540	683	3,600	8,317	11,917	1,558	10,358
1969	6,086	6,086	236	5,489	..	..	..	..	3,682	8,831	12,512	1,698	10,815

(a) At 30 June. Expressed in Australian currency equivalents at ruling rates of exchange. (b) Loan expenditure on works, services, etc. (c) Includes expenditure financed under the United States Defence Credits Arrangements.

SOCIAL

PENSIONS, BENEFITS, ETC.

Year ended 30 June—	Age and invalid pensions		Child endowment		Widows' pensions		Unemployment benefits	
	Pensioners (a)	Amount paid	Children endowed (a)	Endowment paid	Pensioners (a)	Amount paid	No. on benefit—weekly average	Amount paid
	'000	$m	'000	$m	'000	$m	'000	$m
1902	..	..	..	..	..	..	..	..
1912	90	4.3	..	..	..	..	..	..
1922	147	10.8	..	..	..	..	..	..
1932	261	22.3	..	..	..	..	..	..
1942	341	38.5	910	22.6	..	..	..	..
1943	331	44.6	908	23.3	38	4.7	..	..
1944	320	43.4	922	(b)24.5	42	5.6	..	..
1945	316	43.4	939	24.1	44	5.9	..	..
1946	333	53.9	965	36.0	45	6.5	6	1.0
1947	364	58.8	1,007	(b)39.7	43	6.7	9	1.8
1948	381	73.1	1,050	38.9	43	7.8	4	0.7
1949	403	83.4	1,105	48.6	43	8.8	2	(c)
1950	414	89.1	1,836	(b)60.7	43	8.8	13	2.5
1951	417	99.0	2,389	87.2	42	9.7	1	(c)
1952	426	119.6	2,518	93.2	41	11.2	2	(c)
1953	451	144.8	2,624	(b)106.5	41	12.7	30	9.1
1954	478	162.6	2,717	101.5	41	13.2	14	5.0
1955	510	176.0	2,789	105.1	42	13.7	4	1.4
1956	535	203.3	2,876	(b)120.8	43	15.4	4	1.4
1957	554	218.4	2,978	114.1	45	17.7	12	4.2
1958	574	243.2	3,074	117.5	47	19.7	24	9.8
1959	598	259.1	3,172	(b)135.1	50	21.6	28	11.9
1960	619	294.0	3,252	125.1	52	24.3	21	9.0
1961	651	315.9	3,340	(b)148.6	55	26.9	22	8.9
1962	691	360.5	3,420	132.8	57	30.2	53	25.3
1963	711	375.5	3,458	135.4	58	31.4	40	21.3
1964	725	399.9	3,631	(b)168.8	62	41.6	26	13.5
1965	736	426.6	3,711	172.8	65	47.0	14	6.8
1966	744	442.4	3,763	176.4	69	50.0	15	7.8
1967	764	481.8	3,835	(b)199.3	73	56.4	21	11.2
1968	797	514.1	3,891	187.9	75	61.1	22	11.2
1969	827	558.6	3,996	193.3	78	69.1	18	9.3

(a) At 30 June. (b) Five 12-weekly payments made during the year instead of the normal four. (c) Less than $0.05m.

SOCIAL—*continued*

PENSIONS, BENEFITS, ETC.—*continued*

Year ended 30 June—	*Hospital and nursing home benefits—amount paid*	*Medical benefits—amount paid*	*Pharmaceutical benefits—amount paid*	*Total Commonwealth expenditure on pensions, benefits, etc.(a)*	*War pensions*		*Service pensions*	
					No.(b)	*Amount paid*	*No.(b)*	*Amount paid*
	$m	$m	$m	$m	'000	$m	'000	$m
1902 . .	..	..	..	..	..	..	..	..
1912 . .	..	..	..	4.3	..	..	..	..
1922 . .	..	..	..	12.1	225	14.1	..	..
1932 . .	..	..	..	23.0	274	14.9	..	..
1942 . .	..	..	..	61.8	220	15.0	14	1.2
1943 . .	..	..	..	73.2	227	16.8	13	1.3
1944 . .	..	..	..	78.3	245	20.8	13	1.3
1945 . .	..	..	..	78.8	281	22.9	13	1.3
1946 . .	2.2	..	..	106.4	360	26.6	13	1.6
1947 . .	8.8	..	..	124.0	395	30.2	14	1.8
1948 . .	8.9	..	..	137.2	416	32.7	16	2.5
1949 . .	11.8	..	..	161.6	440	37.9	16	2.7
1950 . .	12.6	..	0.1	185.6	471	42.1	16	2.9
1951 . .	13.1	..	5.9	230.0	503	53.1	17	3.0
1952 . .	13.4	2.1	15.4	275.2	525	66.7	17	3.6
1953 . .	14.4	3.5	14.4	331.0	544	72.6	19	4.5
1954 . .	16.7	7.2	18.5	353.1	564	78.1	21	5.4
1955 . .	18.6	13.5	21.5	378.6	584	87.8	22	6.0
1956 . .	19.1	14.6	23.8	429.7	600	91.3	35	8.3
1957 . .	19.6	18.3	23.4	447.8	614	95.6	39	9.8
1958 . .	21.6	20.6	30.1	495.0	629	106.6	42	11.3
1959 . .	29.6	23.2	41.9	556.5	643	109.0	44	12.4
1960 . .	37.2	26.8	48.7	598.7	655	117.5	46	13.5
1961 . .	41.3	28.4	55.8	661.2	662	132.6	50	15.6
1962 . .	44.4	30.6	70.4	730.4	671	135.1	58	19.4
1963 . .	47.3	32.6	76.9	758.6	671	140.7	62	21.7
1964 . .	56.2	34.4	78.8	832.7	669	154.5	65	24.2
1965 . .	58.8	44.6	82.2	890.4	660	153.5	65	25.5
1966 . .	60.7	54.6	91.8	941.6	646	170.1	66	28.2
1967 . .	67.4	58.2	101.3	1,031.1	631	161.4	67	29.1
1968 . .	74.8	62.5	105.1	1,075.0	617	164.4	69	31.8
1969 . .	85.9	66.5	118.4	1,162.3	601	182.9	67	34.1

(*a*) National Welfare Fund items only, including expenditure for all years on pensions benefits, etc., which subsequently became payable from the National Welfare Fund. In addition to the items shown in the preceding columns, the tables include expenditure on—the Rehabilitation Service; milk for school children; Tuberculosis Campaign; sickness, special and funeral benefits and some miscellaneous health services. Excludes war and service pensions, telephone rental concessions for pensioners, and some minor welfare and health services. (*b*) At 30 June.

EDUCATION

POLICE AND PRISONS

Year(a)	*Schools*				*Universities*		*Police*	*Prisons*	*Convicted prisoners*
	Government		*Non-government*						
	Schools	*Pupils*	*Schools*	*Pupils*	*Number*	*Students*			
	'000	'000	'000	'000		'000	'000	No.	'000
1902 . .	7.2	637	2.4	144	4	1.9	5.9	n.a.	4.2
1912 . .	8.4	663	1.9	164	5	3.8	6.6	101	3.4
1922 . .	9.6	837	1.7	202	6	7.8	7.0	92	3.0
1932 . .	10.2	934	1.8	221	6	9.9	8.6	85	4.1
1942 . .	9.0	868	1.8	250	6	10.6	9.7	71	3.5
1943 . .	8.8	874	1.8	264	6	11.4	9.6	69	3.5
1944 . .	8.7	878	1.8	275	6	14.7	9.4	70	3.9
1945 . .	8.4	875	1.8	273	6	17.8	9.4	70	3.9
1946 . .	8.3	887	1.8	277	7	25.0	9.9	70	3.6
1947 . .	8.2	906	1.9	281	7	30.0	10.2	73	3.8
1948 . .	8.0	928	1.8	281	7	31.9	10.6	72	3.5
1949 . .	7.9	971	1.8	293	8	31.1	11.1	71	3.8
1950 . .	7.8	1,027	1.9	310	8	30.0	11.5	70	4.0
1951 . .	7.6	1,078	1.9	326	8	31.1	11.9	70	4.2
1952 . .	7.6	1,145	1.9	348	8	29.1	12.6	69	4.8
1953 . .	7.6	1 206	2.0	366	9	28.3	12.7	70	4.8
1954 . .	7.6	1,275	2.0	388	9	28.9	12.6	71	4.8
1955 . .	7.6	1,337	2.1	410	9	30.3	12.9	72	5.1
1956 . .	7.7	1,357	2.1	432	9	34.0	13.5	73	6.0
1957 . .	7.7	1,427	2.0	453	9	36.6	14.1	73	6.4
1958 . .	7.8	1,498	2.0	474	10	41.5	14.5	73	6.6
1959 . .	7.8	1,560	2.1	492	10	47.2	14.9	74	6.6
1960 . .	7.9	1,613	2.1	511	10	53.4	15.3	77	6.8
1961 . .	8.0	1,664	2.1	527	10	57.7	15.9	75	7.2
1962 . .	7.9	1,713	2.2	540	10	63.3	16.4	74	7.4
1963 . .	7.9	1,757	2.2	553	10	69.1	16.7	73	7.7
1964 . .	7.9	1,801	2.2	565	10	76.2	17.2	74	7.7
1965 . .	7.8	1,857	2.2	581	11	83.3	17.6	74	7.7
1966 . .	7.8	1,921	2.2	583	12	91.3	18.4	76	8.1
1967 . .	7.8	1,994	2.2	595	14	95.4	19.0	75	8.7
1968 . .	7.7	2,058	2.2	601	14	101.5	19.7	79	8.8

(*a*) Years ended at varying dates.

CHRONOLOGICAL TABLE

CHIEF EVENTS IN AUSTRALIA SINCE 1955

NOTES. In issues of the Year Book up to No. 48 (*see* No. 48, page 1201) this table covered events back to the establishment of settlement in Australia in 1788. Later issues up to No. 50 (*see* No. 50, page 1289) covered events back to 1945. This issue covers the years 1955 to 1968 and the first half of 1969.

For each earlier year this Table rarely contains more than two or three items; for recent years, however, in order to provide a wide cover of events, etc., it includes a much greater number. Both the nature of the Table and considerations of space render necessary a continual reduction in these items, and for more information the reader should therefore consult earlier issues.

1955 First power generated by Snowy Mountains Hydro-electric Authority. Australian population reached 9,000,000. Cocos (Keeling) Islands became Territory under authority of Commonwealth.

1956 Amendment to Conciliation and Arbitration Act altered the structure of the arbitration machinery by separating judicial functions from conciliation and arbitration functions.

1957 High Court ruled that interstate vehicles could not be compelled to register in New South Wales, but upheld validity of Victorian tax on commercial vehicles, including those engaged in interstate trade, imposed solely for the maintenance of roads. National Capital Development Commission set up to co-ordinate development of Canberra as centre of government.

1958 Prime Minister officially opened Australia's first nuclear reactor at Lucas Heights, near Sydney. Christmas Island (Indian Ocean) transferred to Australian Administration.

1959 Annual Holidays Act, 1944–1958 provided for three weeks' annual holiday for all New South Wales workers. Population reached 10,000,000.

1960 Provision made for Social Service benefits to be paid to Australian Aborigines. *Commonwealth Banks Act* 1959 and *Reserve Bank Act* 1959 proclaimed (*see* page 617). Goods comprising 90 per cent of Australia's current imports exempted from licensing provisions. National Service training suspended. Commonwealth Government announced special economic measures designed to counter inflationary trend and safeguard overseas funds.

1961 Australia's first guided missile base established at Williamtown (New South Wales). Commonwealth *Matrimonial Causes Act* 1959 unifying State Acts became operative (*see* page 580). Commonwealth Government announced tax concessions to exporters for promotional expenses in developing overseas export markets. Oil discovered in south-west Queensland. Australian population census taken. Iron ore deposits estimated at 1,800 million tons discovered at Pilbara (Western Australia).

1962 Commonwealth and Western Australian Electoral Acts amended to provide for votes for Aborigines. Work began on standardisation of rail gauge from Kwinana to Kalgoorlie (Western Australia). First production of bauxite ore from Weipa deposits. Aborigines exercised voting rights in Northern Territory for first time.

1963 Approval given to agreement for United States to operate a naval communications station at North West Cape, Western Australia. Western Australian Government signed $156 million contract for the establishment and development of a new iron and steel industry in the State. Decimal currency legislation introduced into House of Representatives (*see* Year Book 52, page 672). Australian population reached 11,000,000.

1964 R.A.N. Destroyer *Voyager* sunk in collision off Jervis Bay with loss of eighty-two lives. First general election from common roll in Papua-New Guinea. New South Wales Government employees granted four weeks' annual leave. Moonie to Brisbane oil pipeline opened and Australia's first commercial oil production started. Northern Territory Legislative Council passed legislation removing discrimination against Aborigines. Commonwealth Government established licensing system for intra-state civil aviation. Australian forces saw action in Malaysia. Prime Minister announced expansion of defence provisions involving additional defence expenditure of $2,440 million over three years, resumption of National Service Training and establishment of special Reserve Forces (*see* page 81). *National Service Act* 1964 passed. Commonwealth Government allowed export of iron ore to Japan from fields in Western Australia.

1965 Full High Court judgment on intra-state airlines case held that New South Wales Air Transport Act requiring intra-state services to hold a State licence was valid, but also that four out of five relevant Commonwealth regulations were valid, so that airlines needed Commonwealth licence as well. Martin Report on tertiary education tabled in House of Representatives. New steelworks opened at Whyalla (South Australia). Report of Vernon Committee of Economic Enquiry (appointed in 1963) tabled in House of Representatives. First trade agreement between Australia and U.S.S.R. signed in Moscow. Economic sanctions imposed on Rhodesia. Mills Cross radio telescope opened near Hoskinstown (N.S.W.). Largest Australian built ship, the 49,000 ton bulk ore carrier *Darling River*, launched.

1966 The New Zealand–Australia Free Trade Agreement came into force. Mr Harold Holt sworn in as Prime Minister. Dame Annabelle Rankin included in new ministry, first woman to administer a Commonwealth Government department in Australia. Australia adopted dollar-cent system of decimal currency. Immigration laws amended to provide for relaxation of restrictions on entry of persons of non-European race (*see* page 152). Member for Australian Capital Territory given full voting rights. Australia's third commercial oilfield declared at Barrow Island, 50 miles off Western Australian coast. First shipment of iron ore from Mount Goldsworthy field. Australia joined eight other nations in forming Asian and Pacific Co-operation Council (ASPAC). 1966 census taken. Increase of $2 a week granted in the Basic Wage. Burrinjuck Reservoir only one-third full. First shipment of iron ore (52,000 tons) from Mount Tom Price for Japan. Viscount aircraft crashed in Queensland with loss of twenty-four lives. President Johnson of United States of America made four-day visit to Australia. Permanent employment of married women by Commonwealth Government proclaimed. Minimum housing and food standards for Aboriginal employees in Northern Territory gazetted. New minimum wage rate for Aborigines employed under Northern Territory Wards Employment Ordinance became effective. First television programmes interchanged direct between Britain and Australia by means of the orbiting satellite INTELSAT II. New Commonwealth Department of Education and Science established. Australia's commitment in Vietnam increased.

1967 Worst bushfires in history of Tasmania caused loss of 51 lives and property damage estimated to be more than $20 million in Hobart environs and southern Tasmania. Australian Agricultural Council decided to maintain existing margarine quota limits. Honeysuckle Creek space tracking station for Apollo moon-probe opened by Prime Minister. Queen Elizabeth opened SEACOM communications cable linking Australia with south-east Asia. Commonwealth and State Governments reached agreement on off-shore oil and gas legislation. Under new regulations for export of uranium, exporters must find new deposits at least equal in quantity to proposed exports. First tanker loaded with oil from Barrow Island (W.A.). Referendum in northern New South Wales concerning proposed new State of New England resulted in defeat of proposal. Two Commonwealth referendums held—proposal to abolish link between size of Senate and House of Representatives defeated; removal of discriminatory wording concerning Aborigines from Constitution approved (*see* page 65). Announced that Snowy Mountains Hydro-electric Authority would be disbanded as an integrated construction force on completion of scheme. First direct satellite telecast from North America to Australia. Second Royal Commission into loss of H.M.A.S. *Voyager* (statement of Lieut.-Commander Cabban) commenced. Commonwealth Government approved a two-year trial of a permanent employment scheme for waterside workers proposed in Woodward Report. End of transition period to decimal currency after changeover on 14 February 1966 (*see* page 611). Major alumina plant opened at Gladstone, Queensland. *Defence Forces Protection Act* 1967 came into operation, making it an offence to give, to collect, to solicit, to send or to take moneys or goods to certain named bodies that support forces opposed to Australian troops in or near Vietnam or to similar bodies which may be proclaimed. H.M.A.S. *Oxley*, first of Australia's new submarines, arrived at new submarine base, H.M.A.S. *Platypus*. 36th Session of International Statistical Institute held in Sydney. *Trade Practices Act* 1965–1967, designed to preserve competition in Australian trade and commerce to the extent required by the public interest, came into force. Announced that Commonwealth Government would establish an Office of Aboriginal Affairs to co-ordinate policy and to provide the machinery necessary for joint consultations with the States. A new migration agreement signed between Italy and Australia (*see* page 148). Agreement signed between Australian and Turkish Governments concerning the residence and employment of Turkish citizens in Australia (*see* page 149). Daylight saving became effective in Tasmania. Prime Minister announced that Australia's forces in Vietnam would be increased by more than 1,700 in November–December. Drought in Victoria became increasingly severe. Australian Resources Development Bank formed by Australia's Major Trading Banks and Reserve Bank to finance Australian participation in

1967 –*cont* projects of national importance. Prime Minister announced Government's decision not to devalue Australian dollar with pound sterling. Legislation for control of off-shore oil and gas leases received Royal Assent. Australia launched its first satellite at Woomera. Senate select committee recommended that Australia change over to metric system of weights and measures. Commonwealth Conciliation Commission awarded increases of up to $7.40 in margins to metal trade workers. Lone yachtsman, Alec Rose, reached Australia from England. Prime Minister, Rt Hon. Harold Holt, disappeared while swimming off Portsea, Victoria; Rt Hon. J. McEwen sworn in as Prime Minister.

1968 *January*. Uniform Commonwealth–State censorship laws came into force. Senator J. G. Gorton elected leader of Liberal Party and sworn in as Prime Minister. Memorial service for late Prime Minister Holt held in Westminster Abbey. Twelve-mile fishing limit around Australia, Nauru, Papua and New Guinea, and Cartier Islands operated from 30 January. Nauru became an independent nation on 31 January.

February. New Victorian stamp duty on receipts. Second Papua and New Guinea general election held. The full bench of the Arbitration Court decided that thirty per cent of wage increases exceeding $1.60 per week granted to metal trade employees in December 1967 will be deferred until August. Announced that an agreement had been signed between the Commonwealth Government and a consortium of Swiss and Australian companies for the development of the bauxite deposits at Gove, Northern Territory (*see* page 1036). Report of the second Royal Commission into loss of H.M.A.S. *Voyager* (*see* 1967). Second Gorton Ministry appointed.

March. Commonwealth Government approved in principle the transfer of the principal seat of the High Court to Canberra.

April. Joint Commonwealth–State off-shore petroleum legislation operated from 1 April. Announced that Australia would give 500,000 tons of grain to India. Twenty-fourth session of E.C.A.F.E. held in Canberra. First liver transplant operation in Australia performed in Sydney. Population reached 12,000,000.

May. Commonwealth Government granted States $30 million for technical and agricultural colleges over next three years in addition to $40 million granted over past four years. A direct shipping service between Australia and Chile commenced. Northern Territory member in House of Representatives given full voting rights. Report of United Nations mission to Territory of New Guinea issued by Trusteeship Council.

June. Melbourne became one of the three vital links in World Weather Watch, the other two being Washington and Moscow. The $25 million Warringah Expressway opened in Sydney. Vietnam Medal for Australian Armed Forces instituted and created by Queen.

July. The Commonwealth and State Transport Ministers agreed to new safety design standards for motor cars to be adopted by each state and which are expected to be introduced on all cars first registered from 1 January 1970. Two additional commissioners were appointed to the Arbitration and Conciliation Commission. The new Ambassador of the United States of America to Australia arrived. Dr H. C. Coombs retired, after nineteen years as Governor of the Reserve Bank or its earlier equivalent, the Commonwealth Bank, and Mr J. C. Phillips was appointed to replace him. It was announced that a Sydney firm of architects had been selected to design the National Art Gallery and that an interim council, of twelve members, responsible for the planning and construction of the gallery had been created. The Prime Minister announced that as extra patrol vessels had become available to the Royal Australian Navy they would be used to increase the sea patrols within Australia's 12-mile exclusive fishing zone.

August. New customs procedures were introduced to speed up the movement and clearance of sea cargo in the capital city ports. The Arbitration Commission ordered that the outstanding 30 per cent of the December 1968 judgment be paid from 21 August (*see* February). Mr Bjelke-Petersen sworn in as Premier of Queensland following the death of Mr Pizzey. Two pulsars, mysterious radio sources in the Milky Way, discovered by the Mills Cross radio telescope. The National Library of Australia was opened by the Prime Minister. Announced that the Commonwealth, New South Wales, Victoria and Tasmania will co-operate over the next five years to reduce 'unnecessary differences' in State education curricula. Announced that the immigration programme for 1968–69 of 160,000 settlers would be the biggest ever. The United States Presidential Unit Citation presented to the 6th Battalion R.A.R. The Victorian National Gallery was officially opened.

September. *Privy Council* (*Limitation of Appeals*) *Act* 1968, which makes the High Court of Australia the final court of appeal in all issues involving Commonwealth law and jurisdiction, came into operation. Announcement of a five year $1,000 million development plan for Papua

1968 *–cont* and New Guinea, with the basic aim of developing the territory economically for self-determination. President Park of Korea arrived for a three-day visit. The first complete map coverage of Australia with topographic information completed by the Division of National Mapping; it contains 541 sheets with a scale of 4 miles to the inch and each sheet covers approximately 6,000 square miles. Blowering Dam officially opened.

October. A twenty-four-hour dispute involved teachers in New South Wales and Australian Capital Territory government schools. The Arbitration Commission handed down the national wage judgment that the total wage be increased by $1.35 per week (*see* page 285). The Prime Minister announced that the price of Australian produced oil was to be cut once the incentive scheme for Australian producers of crude oil had been amended (*see* page 1002). An earthquake devastated the town of Meckering in Western Australia. The first heart transplant in Australia was performed in Sydney but patient died in December from causes not associated with the transplanted heart. Announced that scholarships and residential facilities would be provided for Aborigines at all educational levels. Northern Territory Legislative Council Election held, and new council to have an elected majority for the first time. Work commenced on the $27 million Fairbairn Dam in Queensland which is the first part of the Emerald Irrigation Area. Through late October and early November there were disastrous bushfires in New South Wales around Wollongong and in Blue Mountains where three firefighters died, over one hundred houses were destroyed and damage estimated at $12 million was caused. Stoppages of work by railway workers occurred in most States in support of claims for increased wages.

November. Announced that Commonwealth Government will finance a treatment works for an Aboriginal co-operative copper mine in the Northern Territory. Inaugural meeting of the Australian Minerals Council held; it was composed of representatives of the Commonwealth and State Governments. Commonwealth legislation introduced to establish a fund of $4.65 million to enable Aborigines to set up in business, and to provide a non-repayable grant of $3.65 million to the States for Aboriginal advancement. Commonwealth plan for ‘new deal’ for the aged announced. Announced that Aborigines will get tertiary education study grants, commencing in 1969, of up to $1,100 per annum for single persons, plus allowances where applicable for wives and children. An Ordinance to prevent the takeover of life insurance companies registered in the Australian Capital Territory became operative. London to Sydney car marathon started in London on 24 November and finished in Sydney on 17 December 1968. Announced that the Snowy Mountains Authority will become a statutory corporation and act as a consultant body.

December. Full award wages for Aborigines employed in the Northern Territory pastoral industry became operative. Gas leak at Marlin oil rig in Bass Strait and eventually sealed by an American expert brought to Australia. The last of the 110 Australian manufactured Mirage jets was delivered to the R.A.A.F. The Tasmanian anti-capital punishment legislation received Royal Assent.

1969 (*to June*) *January*. Viscount airliner crashed at Port Hedland, Western Australia, killing all twenty-six on board. The Prime Minister attended the conference of Commonwealth Prime Ministers in London. The Australian stock exchanges took steps to permit differential voting rights on the shares of listed companies to prevent overseas takeovers. The modernisation and expansion of the railway marshalling yard at Melbourne, costing $11 million, was completed. Fifteen died and more than 200 houses were destroyed in disastrous fires in Southern Victoria. Cannon from Captain Cook’s ship the *Endeavour* were found in Northern Queensland waters. It was announced that Queen Elizabeth and the Duke of Edinburgh would visit Australia in March and April 1970. Stoppages of work by railway workers occurred in most States in support of claims for increased wages.

February. The Sydney–Melbourne express train the *Southern Aurora* collided head-on with a goods train at Violet Town, Victoria, causing loss of life and extensive damage to both trains. Announced that three Aborigines would be appointed as liaison officers for the Commonwealth Office of Aboriginal Affairs. The New South Wales cabinet, which has been increased by two, was sworn in. The new Bass Strait ferry, the *Australian Trader*, of 8,500 tons, was launched at the State dockyard in Newcastle, N.S.W. The Prime Minister announced that Australian Defence Forces would be kept in Malaysia and Singapore for an indefinite period after Britain withdraws her military strength in 1971. Further stoppages of work by railway workers occurred.

March. Australia’s first natural gas pipe line from Roma to Brisbane was opened. The New South Wales Government adopted the $75 million Botany Bay port development scheme and it is to be carried out in four stages over fifteen years. The Nimmo report on national

1969 (*to June*) *–cont* health insurance scheme tabled in the House of Representatives. The Prime Minister visited the United States of America and Canada, and during the visit he attended the funeral of the former President of the United States, General Dwight D. Eisenhower. Natural gas entered the Melbourne metropolitan system for the first time.

April. A receipts tax in Tasmania became operative. The second annual meeting of the Board of Governors of the Asian Development Bank was held in Sydney. Announced that the Commonwealth Government would buy two container vessels costing $9 million instead of chartering them (one for the Europe–Australia run and the other for the North America–Australia run) and that the Australian National Line would operate them in a joint venture with British shipping lines. The Prime Minister announced that Australia would give Malaysia ten Sabre aircraft and associated support services. Mr Gorton announced that the Government had accepted the proposal of the United States Government to establish a defence space communications facility at Woomera. Sir Paul Hasluck was sworn in as Governor-General.

May. The *Copyright Act* 1968 became operative and at the same time Australia became a party to the Universal Copyright Convention and to the Brussels revision of the Berne Copyright Convention. The Prime Minister visited the United States of America for discussions with the President, Mr Nixon. Construction commenced on the main Ord River Dam ($12.9 million) in Western Australia. Announced that the B.H.P. Company, in conjunction with an English Company, would establish a steelworks at Westernport, Victoria, and that the first stage—a rolling mill—would be completed by 1972. Mr Bethune, the leader of the Tasmanian Liberal–Centre party coalition, was sworn in as Premier following the elections in which the Labor Party was defeated after thirty-five years in office. Australia wide stoppages took place over the operation of the penal provisions of the Commonwealth Conciliation and Arbitration Act. The Commonwealth Government decided that Camp Hill would be the site for the new and permanent Parliament House in the National Capital.

June. Announcement of a major programme to encourage employers to take on more Aborigines for long-term job training by subsidising employers by 30 per cent of the applicable award rate, and by paying living-away-from-home allowances to young Aborigines. The H.M.A.S. *Melbourne* collided with the destroyer U.S.S. *Evans*, cutting that ship in half, during a SEATO exercise in the South China Sea, with the loss of fifty-seven American seamen. A joint inquiry (United States Navy and Royal Australian Navy) into the collision was held at Subic Bay in the Philippines. The first passenger train used the Perth–Port Pirie section of the new standard gauge railway. The Prime Minister announced that Navy and Air Force patrols along the Great Barrier Reef would be increased following incidents involving foreign fishing vessels. Five power (Australia, New Zealand, United Kingdom, Malaysia and Singapore) talks on the future defence of Malaysia and Singapore were held in Canberra. The Arbitration Commission handed down its decision on equal pay for women (*see* Appendix). The new Australian Chancery in Washington (cost $9 million) was opened by Lord Casey. The Governor-General Sir Paul Hasluck officially opened the Mount Newman, Western Australia, iron ore enterprise from which the first shipment of iron ore had been made on 1 April 1969.

DIARY OF PRINCIPAL ECONOMIC EVENTS, 1968-69

The principal economic events in earlier years were shown in the following issues:

Years	*Year Book No.*	*Pages*
1931 to 1938	33	968–77
1939 to 1944	36	1129–41
1945 to 1948	37	1235–45
1949 to 1951	39	1331–40
1952 to 1955	42	1149–60
1956 to 1958	46	1185–92
1958–59 to 1961–62	48	1188–1200
1962–63	49	1253–56
1963–64	50	1283–88
1964–65	51	1269–74
1965–66	52	1185–88
1966–67	53	1279–82
1967–68	54	1253–57

Rapid growth characterised the Australian economy in the year 1968–69. Gross national product measured at current prices rose 12 per cent to $27,114 million; at constant prices it increased by 8.5 per cent. Relief from the severe drought conditions in south-eastern Australia, which last year caused a fall of 21 per cent in gross farm product at factor cost, was reflected in an increase of 27 per cent to $2,194 million in gross farm product at factor cost. It should be noted, however, that approximately two-thirds of the increase in farm product in 1968–69 was reflected in a large build-up in wheat stocks.

Demand increased strongly with gross national expenditure rising by $2,704 million, or 11 per cent, compared with an increase of 8 per cent in 1967–68. Much of this increase was attributable to the sharp rise of $407 million in the value of farm stocks, which was also reflected in the estimate of personal saving. In 1967–68 farm stocks decreased in value by $195 million. Non-farm stocks are estimated to have increased in value by $389 million, compared with an increase of $414 million in 1967–68. Personal consumption expenditure rose by 7 per cent to $15,677 million compared with a rise of 8 per cent in 1967–68. Current expenditure of public authorities increased by $286 million, or 9 per cent. Commonwealth authorities raised their spending by $111 million, or 7 per cent, while State and local government authorities increased their current expenditure by $175 million, or 12 per cent. Fixed capital expenditure of public authorities and enterprises rose 8 per cent to $2,553 million. Private gross fixed capital expenditure accelerated strongly. Expenditure on dwellings was $1,256 million, a rise of 16 per cent over the 1967–68 level. Expenditure on other buildings and construction rose 15 per cent to $1,015 million, while expenditure on business vehicles, plant and machinery was $2,375 million, an increase of 10 per cent which was a marked improvement on the 3 per cent increase of last year. Once again, mining featured prominently in these rises in capital expenditure. Significant discoveries during the year of mineral deposits, particularly bauxite, lead and zinc, phosphate, petroleum and natural gas, coal and nickel, promise further heavy development expenditure in these industries.

The gross operating surplus of non-farm enterprises increased by 11 per cent in both 1968–69 and 1967–68, while wages, salaries and supplements increased by 11 per cent in 1968–69 compared with an increase of less than 9 per cent in 1967–68.

In the first three months of 1968–69 new and increased lending commitments of major trading banks had risen to a weekly rate of $36 million which was $2.8 million higher than the weekly rate for 1967–68. An additional one per cent of trading banks' deposits was called into their statutory reserve deposits, with the Reserve Bank in October and November 1968; at the same time the maximum overdraft rate was increased by ¼ per cent. Lending commitments averaged $34 million per week between September 1968 and June 1969. However, a high rate of repayments, cancellations and reductions had the net effect for the year of cutting the growth of loans and advances outstanding. A significant balance of payments surplus had the effect of injecting liquidity into the economy from overseas. Financing of the large wheat crop meant that Rural Credit advances outstanding turned from a decline of $142 million in 1967–68 to a rise of $260 million in 1968–69. Net sales of Commonwealth securities by the Reserve Bank in 1968–69 amounted to $75 million, compared with net purchases of $178 million in 1967–68. The Commonwealth Budget also had liquidity reducing effects, budget receipts exceeding domestic outlays by some $200 million. Deposits with trading and savings banks plus notes and coin held by the public increased by 9.3 per cent ($1,185 million) compared with a rise of 8.3 per cent in 1967–68. Balances outstanding of finance companies increased by over 15 per cent in the year to March 1969. As a whole, expansionary influences prevailed and there was a net increase in monetary liquidity.

Exports of goods and services increased in value in 1968–69 by $338 million or almost 10 per cent, which compared favourably with the 2 per cent increase of 1967–68. Both the quantity of wool exported and average export price received rose by about 5 per cent to lift the value of wool exports from $643 million in 1967–68 to $718 million. Dramatic increases were recorded in the value of exports of minerals: exports of iron ore and concentrates rose from $103 million to $180 million and coal from $85 million to $116 million. Chemical elements and compounds increased from $58 million to $85 million. These gains were somewhat offset by a decrease in the value of exports of cereal grains and cereal preparations from $419 million in 1967–68 to $352 million in 1968–69. The total value of imports of goods and services rose by 3 per cent, or $115 million, compared with a 12 per cent increase in 1967–68. Australia's balance of payments deficit on current account decreased from $1,058 million in 1967–68 to $991 million in 1968–69. This was more than offset by a net apparent capital inflow of $1,149 million which resulted in a favourable net official monetary movement of $158 million. The year ended with Australia's holdings of gold and foreign reserves standing at $1,310 million, an increase of about $200 million for the year.

Immigration in 1968–69 was at its highest level since 1950. Net immigration for the year was 126,400 persons. As a result, some 60,000 migrant workers were added to the work force. During 1968–69 the total number of persons in employment increased by approximately 3 per cent, or 150,000, and in the second half of the year it became evident that employment conditions were tightening. In these 6 months registered unemployment declined from 67,000 to 55,000 while registered vacancies rose from 8,000 to 44,000. Both average weekly earnings and weighted average minimum weekly wage rates increased slightly more in 1968–69 than in 1967–68. The Commonwealth Conciliation and Arbitration Commission ordered that the deferred work value increases granted to Metal Trades Award classifications should be payable as from late August 1968, giving most tradesmen an extra $2.20 a week on their award rate. Total wages for adult males and adult females in Commonwealth awards increased by $1.35 a week operative from late October 1968. In June 1969 the Arbitration Commission announced it was prepared to implement the principle of equal pay for equal work for adult females working under Commonwealth awards and determinations. Australia-wide stoppages took place in May 1969 over the operation of the penal provisions of the Commonwealth Conciliation and Arbitration Act. Other major disputes occurred in October, January and February when railway workers in most States stopped work in support of claims for increased wages.

Between June quarter 1968 and June quarter 1969 the Consumer Price Index rose by 2.9 per cent, the same rate of increase as in the previous year.

During 1968–69 payments of cash benefits to persons rose by $117 million to $1,442 million. Social service pensions were increased. Special provisions were made for Aboriginal people in the fields of health, education, housing and business enterprise.

During the year the first preliminary hearing of the Commonwealth Trade Practices Tribunal was held in Hobart. Later, the validity of the Commonwealth Trade Practices Act was challenged in the High Court and a writ of prohibition from proceeding with the hearing was issued against the Tribunal. In the Australian Capital Territory, following substantial purchases of shares by an overseas company in a holding company which owned, *inter alia*, a large Australian insurance company, an ordinance was gazetted to restrict the foreign ownership of shares in life insurance holding companies registered in the Territory. This also led to some reconsideration of overseas investment policies and of problems associated with borrowing in Australia by overseas-owned companies. During March, Federal and State Attorneys-General agreed to adopt the recommendations of the Eggleston Committee on company law reform which were mainly to compel disclosure of the identity of major shareholders in public companies and to restrict take-overs.

1968–69

10 *July*. Savings bank interest rates increased from 3.50 to 3.75 per cent.

24 *July*. Special Bonds Series Q issued at par with interest rates ranging from 4.6 to 5.2 per cent and optional redemption prices ranging from par to 103 per cent at maturity on 1 April 1976.

25 *July*. Commonwealth DM100 million ($A22 million) public loan opened in Germany, issued at 98½ with interest at 6.75 per cent, for a period of 15 years, and a yield of 6.91 per cent per annum.

30 *July*. Commonwealth cash loan opened with yields of 4.88 per cent for 2 years 6 months, 5.10 per cent for 9 years 9 months, 5.25 per cent for 21 years 6 months and 5.25 per cent for 35 years 6 months. An amount of $125 million was raised.

1 *August*. Announced that the Commonwealth Government would pay an extra $14.5 million to primary producers to compensate for the Sterling devaluation, bringing total payments to $48.5 million.

5 *August*. Announced that the Commonwealth Government will compensate exporters of manufactured goods affected by the Sterling devaluation to the extent of the price deductions made in order to remain in overseas markets. On 12 *August* it was announced that compensation of $6.8 million would be paid to the sugar industry.

6 *August*. The Commonwealth Conciliation and Arbitration Commission ordered that the deferred work value increases granted to Metal Trades Award classifications should be payable as from the beginning of the first pay period commencing on or after 21 August 1968, giving most tradesmen under this award an extra $2.20 a week.

11 *August*. Announced that payroll tax rebates amounting to $25.2 million had been allowed to exporting firms during 1967–68.

13 *August*. Commonwealth Budget for 1968–69 introduced into House of Representatives. The Budget provided for estimated expenditure of $6,590.9 million and estimated receipts of $6,044.2 million in the year 1968–69. Further details of the 1968–69 Budget are set out in the Appendix to this Year Book. In 1967–68 receipts of the Commonwealth were $5,468.2 million, and expenditure amounted to $6,112 million. The main items of revenue (1966–67 figures shown in parentheses) were: income taxes $3,036.7 million ($2,729.8 million); excise duties $853.6 million ($805.9 million); sales tax $417 million ($379.3 million); customs duties $313.7 million ($277 million); and pay-roll tax $184.4 million ($172.2 million). The main items of expenditure were: payments to or for the States $1,353.5 million ($1,216.8 million); defence services $1,115.4 million ($957.9 million); social and health services $1,075 million ($1,031.1 million); State works and housing programmes $677 million ($645 million); advances for capital purposes $356.6 million ($328.4 million); and repatriation services $260.1 million ($250.7 million).

Announced that the Commonwealth Government would spend $27 million over the 3 years 1969 to 1971 on secondary school libraries, mainly on reference books in the initial period.

20 *August*. The Commonwealth Government announced that it had allocated $19.3 million for drought relief in the States during 1968–69, as follows: Victoria $11 million, New South Wales $6 million, South Australia $1.4 million and Queensland $0.9 million.

23 *August*. Proposals for the new 5-year scheme for the financial support of the Wheat Industry were announced (*see* page 834).

3 *September*. 1968–69 Tasmanian Budget introduced, providing for a deficit of $3,879,000 before receipt of the completion payment of the special grant. It was estimated that revenue would be $106,342,000 and expenditure $110,221,000. In 1967–68 revenue amounted to $100,563,000 and expenditure to $102,413,000 leaving a deficit of $1,850,000 before receipt of the completion payment of the special grant.

5 *September*. 1968–69 South Australian Budget introduced, providing for a surplus of $21,000. It was estimated that revenue would be $295,305,000 and expenditure $295,284,000. In 1967–68 revenue amounted to $274,544,000 and expenditure to $277,404,000 leaving a deficit of $2,860,000.

10 *September*. Announcement of a 5-year $1,000 million development plan for Papua and New Guinea, with the basic aim of developing the Territory economically for self determination.

18 *September*. 1968–69 Victorian Budget introduced, providing for a balanced budget with estimated revenue and expenditure at $650,671,000. Railway operating expenses and income were estimated at $115,520,000 and $107,292,000 respectively, leaving a loss of $8,228,000. In 1967–68 total budget revenue amounted to $601,328,000 and total budget expenditure to $604,122,000 leaving a deficit of $2,794,000.

25 *September*. 1968–69 New South Wales Budget introduced, providing for an overall deficit of $4,332,000 after allowing for the net results of business undertakings. It was estimated that receipts and expenditure, excluding business undertakings, would be $653,820,000, and $658,152,000, respectively. In 1967–68, revenue was $601,336,000 and expenditure $600,876,000 leaving a surplus of $459,000.

26 *September*. 1968–69 Queensland Budget introduced providing for a small surplus of $16,000 with estimated revenue and expenditure at $377,028,000 and $377,012,000 respectively. In 1967–68 revenue amounted to $357,219,000 and expenditure to $356,249,000 leaving a surplus of $970,000.

27 *September*. The Australian Meat Board imposed a major reduction in meat exports to the United States of America to avoid the application of quotas by America.

1 *October*. 1968–69 Western Australian Budget introduced providing for a balanced budget with revenue and expenditure estimated to be $272,216,000. In 1967–68 revenue amounted to $250,738,000 and expenditure to $249,909,000, leaving a surplus of $829,000.

2 *October*. Arrangements made for loan of $US25 million by Export-Import Bank of the United States to assist in financing importation of capital equipment from United States of America. The loan was issued at par, with interest at 7 per cent for a period of 15 years.

4 *October*. The Arbitration Commission handed down the national wage judgment that the total wage be increased by $1.35 per week (*see* page 285).

10 *October*. The Prime Minister announced that the price of Australian produced oil was to be cut once the incentive scheme for Australian producers of crude oil had been amended (*see* page 1002).

11 *October*. The Reserve Bank announced that overdraft lending would be tighter and dearer and that the maximum interest rates chargeable by the trading banks had been increased by one-quarter per cent to 7¼ per cent.

14 *October*. It was announced that the raw cotton bounty for the 1968 crop would be paid on the basis of production instead of the previous basis of locally grown cotton sold for use in Australian mills.

23 *October*. The Reserve Bank increased the statutory reserve deposit ratio of the major trading banks by one-half per cent to 8½ per cent.

1 *November*. *Income Tax Assessment Act* (*No*. 3) 1968 became effective. This Act abolished the income tax rebate of 10 cents in the dollar on interest received from Commonwealth loan securities issued after 1 November 1968.

Special Bonds Series R issued at par with interest rates ranging from 4.80 to 5.40 per cent and optional redemption prices ranging from par to 103 per cent at maturity on 1 July 1976. Maximum limit for individual holdings raised from $20,000 to $30,000.

7 *November*. Commonwealth cash loan opened with yields of 4.96 per cent for 2 years 6 months, 5.25 per cent for 10 years, 5.40 per cent for 21 years 6 months and 5.40 per cent for 35 years 6 months. An amount of $114 million was raised. At the same time and on the same terms and conditions, a conversion offer was made with respect to $428 million maturing on 15 November 1969—conversions totalled $314 million.

15 *November*. The Reserve Bank increased the statutory reserve deposit ratio of the major trading banks by one-half per cent to 9 per cent.

19 *November*. An ordinance, to restrict the number and value of foreign shares that may be held in certain life insurance holding companies incorporated in the Australian Capital Territory, became operative.

20 *November*. Commonwealth 60 million Swiss francs ($A12 million) public loan issued at par with interest at 5.50 per cent for a period of 15 years.

29 *November*. Issue price of Commonwealth Treasury Notes reduced to 98.90 per cent for three-month notes to yield 4.461 per cent to maturity and to 97.78 per cent for six-month notes to yield 4.553 per cent to maturity.

2 *December*. Further payments announced bringing the total compensation for rural industries for losses on exports from Sterling devaluation to $58 million.

3 *December*. The last of the 110 Australian manufactured Mirage jets was delivered to the R.A.A.F.

9 *December*. Government approval was announced of the plan to double the size of the bauxite project at Gove which will cost $300 million. Approval was also announced of the Australian ownership being reduced from 50 per cent to 30 per cent.

10 *December*. Announced that the Australian and New Zealand Bank Ltd (A.N.Z.) and the English, Scottish and Australian Bank Ltd (E.S.& A.) planned to merge.

18 *December*. Announced that the Commonwealth Government had increased its aid to local manufacturers of small motor cars by reducing the minimum Australian content from 95 per cent to 85 per cent for manufacturers with a sales volume less than 25,000 per annum.

20 *December*. Issue price of Commonwealth Treasury Notes reduced to 98.89 per cent for three-month notes to yield 4.502 per cent to maturity, and to 97.76 per cent for six-month notes to yield 4.595 per cent to maturity.

1 *January.* The 1968 International Sugar Agreement became operative (*see* page 858).
The landing fees for international aircraft landing in Australia were increased from $744 to $898.

5 *January.* The Australian stock exchanges took steps to permit differental voting rights on the shares of listed companies to prevent overseas takeovers.

20 *January.* A contract, worth more than $900 million, was signed in Tokyo for the supply of 85 million tons of coal from central Queensland. The coal will be exported over 13 years commencing July 1971.

24 *January.* Issue price of Commonwealth Treasury Notes reduced to 98.88 per cent for three-month notes to yield 4.543 per cent to maturity, and to 97.74 per cent for six-month notes to yield 4.637 per cent to maturity.

28 *January.* It was announced that a record sale of 2.2 million tons of wheat, worth $125 million, had been made to China (mainland).

5 *February.* Commonwealth DM200 million public loan ($A44 million) opened in Germany, issued at 99.50 per cent with interest at 6.50 per cent for a period of 15 years to give a yield of 6.55 per cent per annum.

A DM100 million ($A22 million) private loan was arranged in Germany, issued at 99.50 per cent with interest at 6.25 per cent for a period of 6 years to give a yield of 6.35 per cent per annum.

Commonwealth cash loan opened with yields of 5 per cent for 2 years 7 months, 5.13 per cent for 5 years 3 months, 5.30 per cent for 11 years 9 months, 5.40 per cent for 18 years 3 months and 5.40 per cent for 31 years. An amount of $202 million was raised. At the same time, and on the same terms and conditions, a conversion offer was made with respect to $120 million maturing on 15 February 1969. Conversions totalled $83 million.

12 *February.* Announced that the Government Aircraft Factory, Melbourne had won a $13 million contract from General Aircraft Corporation of America to supply parts for the new G.A.C.100 turboprop airliner.

13 *February.* The price for Bass Strait oil was fixed by the Commonwealth Government at $2.06 a barrel for 5 years from September 1970 (*see* page 1002).

12 *March.* The Reserve Bank gave the trading banks permission to issue marketable certificates of deposit. These deposits are issued in amounts of $50,000 or more for a period of over 3 months and up to 2 years, yielding up to 4.75 per cent per annum.

13 *March.* It was announced that the States would receive $1,252 million in road grants over the next 5 financial years. This was an increase of $502 million over the previous 5-year period and it would be distributed on a new basis so that all States would receive an increase of not less than 50 per cent.

The Australian Wheat Growers' Federation approved the introduction of a bushel quota system because of over production in the wheat industry (*see* 30 April).

18 *March.* The New South Wales Government announced that it had adopted the $75 million Botany Bay Port Development Scheme which would be carried out in four stages over 15 years.

1 *April.* A receipts tax in Tasmania became operative.

11 *April.* Issue price of Commonwealth Treasury Notes reduced to 98.87 per cent for three-month notes to yield 4.584 per cent to maturity, and to 97.71 per cent for six-month notes to yield 4.700 per cent to maturity.

13 *April.* Announced that a $150 million expansion scheme would be undertaken at the Port Kembla Steel Works. The expansion would include a $40 million blast furnace which is to be completed in 1971.

17 *April.* The Commonwealth Government announced that it would buy two container vessels costing $9 million instead of chartering them (one for the Europe–Australia run and the other for the North America–Australia run) and that the Australian National Line would operate them in a joint venture with British shipping lines.

23 *April.* Special Bonds Series S issued at par with interest rates ranging from 5 to 5.40 per cent and optional redemption prices ranging from par to 103 per cent to maturity on 1 March 1977.

28 *April.* Announced that a $1,200 million contract had been signed for the supply of 123 million tons of iron pellets and fines to be produced from Western Australian mines and shipped to Japan over 15 years commencing in 1971.

30 *April.* Commonwealth cash loan opened with yields of 5.20 per cent for 3 years, 5.30 per cent for 6 years 11 months, 5.40 per cent for 14 years 2 months, 5.40 per cent for 25 years 6 months and 5.40 per cent for 35 years. An amount of $81 million was raised.

30 *April*. The Treasurer announced the main principles of the Drought Bond Scheme which would be introduced later in the year.

Announced that the Commonwealth Government had accepted the plan put forward by the Australian Wheat Growers' Federation and that it will guarantee finance to provide an advance of $1.10 per bushel on wheat of the 1969–70 season not exceeding in aggregate 357 million bushels.

1 *May*. It was announced that the Commonwealth Government had approved the second stage of the internal airlines $70 million jet re-equipment programme. Each airline is to purchase one extra Boeing 727 and six more DC9 aircraft.

21 *May*. Freight rates between East coast North American ports and Australia were increased by 10 per cent.

23 *May*. Issue price of Commonwealth Treasury Notes reduced to 98.85 per cent for three-month notes to yield 4.666 per cent to maturity and to 97.67 per cent for six-month notes to yield 4.784 per cent to maturity.

24 *May*. Announced that the B.H.P. Company, in conjunction with an English company, would establish a steelworks at Westernport, Victoria. The first stage, a rolling mill, would be completed by 1972.

6 *June*. Issue price of Commonwealth Treasury Notes reduced to 98.82 per cent for three-month notes to yield 4.789 per cent to maturity and to 97.61 per cent for six-month notes to yield 4.910 per cent to maturity.

19 *June*. The Arbitration Commission handed down its decision on equal pay for women (*see* Appendix).

26 *June*. Australian Loan Council met and approved a borrowing programme for 1969–70 of $758 million ($626 million for State Works, $132 million for Commonwealth-State housing). A borrowing programme of $372 million was also approved for State semi-government and local government authorities.

30 *June*. Special cash loan of $112 million, financed from a Commonwealth trust fund, issued to complete State loan programmes for 1968–69. Terms were the same as those of the cash loan which opened on 30 April 1969.

APPENDIX

Some recent information which has come to hand since the various chapters were sent to press is given in summarised form in the following pages, but for later statistics on the subjects dealt with in chapters reference should in general be made to other publications issued by this Bureau, e.g. the *Monthly Review of Business Statistics*, the *Quarterly Summary of Australian Statistics*, the *Digest of Current Economic Statistics*, and the various mimeographed statements issued on particular subjects (*see* Publications issued by the Commonwealth Statistician, pages 1210–21 of the chapter Miscellaneous)

CHAPTER 3. GENERAL GOVERNMENT

Parliamentary government

Commonwealth Ministries, page 55

THIRD GORTON MINISTRY—12 NOVEMBER 1969

**Prime Minister*—
THE RT HON. J. G. GORTON, M.P. (Vic.) (Lib.)

**Deputy Prime Minister and Minister for Trade and Industry*—
THE RT HON. J. MCEWEN C.H., M.P. (Vic.) (C.P.)

**Minister for External Affairs*—
THE RT HON. W. MCMAHON, M.P. (N.S.W.) (Lib.)

**Minister for Primary Industry*—
THE HON. J. D. ANTHONY, M.P. (N.S.W.) (C.P.)

**Postmaster-General and Vice-President of the Executive Council*—
THE HON. A. S. HULME, M.P. (Qld) (Lib.)

**Treasurer*—
THE HON. L. H. E. BURY, M.P. (N.S.W.) (Lib.)

**Minister for Shipping and Transport and Assisting the Minister for Trade and Industry*—
THE HON. IAN SINCLAIR, M.P. (N.S.W.) (C.P.)

**Minister for Supply and Leader of the Government in the Senate*—
SENATOR THE HON. KEN ANDERSON (N.S.W.) (Lib.)

**Minister for Defence*—
THE HON. MALCOLM FRASER, M.P. (Vic.) (Lib.)

**Minister for National Development*—
THE HON. R. W. C. SWARTZ, M.B.E., E.D., M.P. (Qld) (Lib.)

**Minister for Labour and National Service and Leader of the House*—
THE HON. B. M. SNEDDEN, Q.C., M.P. (Vic.) (Lib.)

**Minister for Education and Science*—
THE HON. N. H. BOWEN, Q.C., M.P. (N.S.W.) (Lib.)

**Minister for the Interior*—
THE HON. P. J. NIXON, M.P. (Vic.) (C.P.)

Minister for External Territories—
THE HON. C. E. BARNES, M.P. (Qld) (C.P.)

Minister for Health—
THE HON. A. J. FORBES, M.C., M.P (S.A.) (Lib.)

Minister for Housing—
SENATOR THE HON. DAME ANNABELLE RANKIN, D.B.E. (Qld) (Lib.)

Minister for Immigration and Assisting the Treasurer—
THE HON. PHILLIP LYNCH M.P. (Vic.) (Lib.)

Minister for Social Services and under the Prime Minister, Minister-in-Charge of Aboriginal Affairs—
THE HON. W. C. WENTWORTH, M.P. (N.S.W.) (Lib.)

Minister for Works and under the Minister for Trade and Industry, Minister-in-Charge of Tourist Activities—
SENATOR THE HON. R. C. WRIGHT (Tas.) (Lib.)

Minister for Civil Aviation—
SENATOR THE HON. R. C. COTTON (N.S.W.) (Lib.)

Minister for Customs and Excise—
THE HON. D. L. CHIPP, M.P. (Vic.) (Lib.)

Minister for Air—
SENATOR THE HON. T. C. DRAKE-BROCKMAN, D.F.C. (W.A.) (C.P.)

Attorney-General—
THE HON. T. E. F. HUGHES, Q.C., M.P. (N.S.W.) (Lib.)

Minister for Repatriation—
THE HON. R. MCN. HOLTEN, M.P. (Vic.) (C.P.)

Minister for the Army and Minister Assisting the Prime Minister—
THE HON. A. S. PEACOCK M.P. (Vic.) (Lib.)

Minister for the Navy—
THE HON. D. J. KILLEN M.P. (Qld) (Lib.)

*Minister in the Cabinet.

Members of the Commonwealth Parliament

The following is a list of Senators and Members of the House of Representatives of the Commonwealth Parliament as at 25 November 1969. Party affiliation is indicated by the use of the following abbreviations.

A.D.L.P.—Australian Democratic Labor Party
A.L.P.—Australian Labor Party
C.P.—Australian Country Party
Ind.—Independent
Lib.—Liberal Party of Australia

MEMBERS OF THE COMMONWEALTH PARLIAMENT
25 NOVEMBER 1969

THE SENATE

President:
Senator the Hon. Sir Alister Maxwell McMullin, K.C.M.G.

Chairman of Committees:
Senator T. L. Bull, O.B.E.

Leader of the Government in the Senate:
Senator the Hon. K. M. Anderson

Leader of the Opposition in the Senate:
Senator L. K. Murphy, Q.C.

Senator	*State*	*Term(a) expires 30 June*
Anderson, Hon. K. M. (Lib.)	N.S.W.	1971
Bishop, R. (A.L.P.)	S.A.	1974
Branson, G. H. (Lib.)	W.A.	1971
Brown, W. W. C. (A.L.P.)	Vic.	*(b)*
Bull, T. L., O.B.E. (C.P.)	N.S.W.	1971
Buttfield, Nancy E. (Lib.)	S.A.	1974
Byrne, C. B. (A.D.L.P.)	Qld	1974
Cameron, D. N. (A.L.P.)	S.A.	1971
Cant, H. G. J. (A.L.P.)	W.A.	1971
Cavanagh, J. L. (A.L.P.)	S.A.	1974
Cormack, M. C. (Lib.)	Vic.	1974
Cotton, Hon. R. C. (Lib.)	N.S.W.	1974
Davidson, G. S. (Lib.)	S.A.	1971
Devitt, D. M. (A.L.P.)	Tas.	1971
Dittmer, F. (A.L.P.)	Qld	1971
Drake-Brockman, Hon. T. C., D.F.C. (C.P.)	W.A.	1971
Drury, A. J. (A.L.P.)	S.A.	1971
Fitzgerald, J. F. (A.L.P.)	N.S.W.	1974
Gair, Hon. V. C. (A.D.L.P.)	Qld	1971
Georges, G. (A.L.P.)	Qld	1974
Greenwood, I. J. (Lib.)	Vic.	1971
Hendrickson, A. (A.L.P.)	Vic.	1971
Keeffe, J. B. (A.L.P.)	Qld	1971
Kennelly, Hon. P. J. (A.L.P.)	Vic.	1971
Lacey, R. H. (A.L.P.)	Tas.	1971
Laucke, C. L. (Lib.)	S.A.	1974
Lawrie, A. G. E. (C.P.)	Qld	1971
Lillico, A. E. D. (Lib.)	Tas.	1971
Little, J. A. (A.D.L.P.)	Vic.	1974
McClelland, D. (A.L.P.)	N.S.W.	1974
McKellar, Hon. G. C. (C.P.)	N.S.W.	1974
McManus, F. P. (A.D.L.P.)	Vic.	1971
McMullin, Hon. Sir Alister, K.C.M.G. (Lib.)	N.S.W.	1971
Marriott, J. E. (Lib.)	Tas.	1971
Maunsell, C. R. (C.P.)	Qld	1974
Milliner, B. R. (A.L.P.)	Qld	1974
Mulvihill, J. A. (A.L.P.)	N.S.W.	1971
Murphy, L. K., Q.C. (A.L.P.)	N.S.W.	1974
O'Byrne, J. (A.L.P.)	Tas.	1971
Ormonde, J. P. (A.L.P.)	N.S.W.	1971
Poke, A. G. (A.L.P.)	Tas.	1974
Poyser, A. G. (A.L.P.)	Vic.	1974
Prowse, E. W. (C.P.)	W.A.	1974
Rae, P. E. (Lib.)	Tas.	1974
Rankin, Hon. Dame Annabelle, D.B.E. (Lib.)	Qld	1974
Ridley, C. F. (A.L.P.)	S.A.	1971
Scott, Hon. M. F. (Lib.)	W.A.	1971
Sim, J. P. (Lib.)	W.A.	1974
Toohey, J. P. (A.L.P.)	S.A.	1971
Turnbull, R. J. D. (Ind.)	Tas.	1974
Webster, J. J. (C.P.)	Vic.	1974
Wedgwood, Dame Ivy E. D.B.E. (Lib.)	Vic.	1971
Wheeldon, J. M. (A.L.P.)	W.A.	1971
Wilkinson, L. D. (A.L.P.)	W.A.	1974
Willesee, D. R. (A.L.P.)	W.A.	1974
Withers, R. G. (Lib.)	W.A.	1974
Wood, I. A. C. (Lib.)	Qld	1971
Wriedt, K. S. (A.L.P.)	Tas.	1974
Wright, Hon. R. C. (Lib.)	Tas.	1974
Young, H. W. (Lib.)	S.A.	1974

(*a*) Senators are elected for a term of six years on a rotational basis; the terms of half the Senators expire every third year. (*b*) Filling casual vacancy.

Representation of the Parties in the Senate is as follows: A.D.L.P., 4; A.L.P., 28; C.P., 7; Ind., 1; Lib., 20.

MEMBERS OF THE COMMONWEALTH PARLIAMENT
25 NOVEMBER 1969—*continued*

THE HOUSE OF REPRESENTATIVES
(Triennial Parliaments—Last General Election
25 October 1969)

Speaker:
THE HON. W. J. ASTON, M.P.

Chairman of Committees:
P. E. LUCOCK, M.P.

Leader of the Opposition:
E. G. WHITLAM, Q.C., M.P.

Member	*Division*
Adermann, Rt Hon. C. F. (C.P.)	Fisher (Q.)
Anthony, Hon. J. D. (C.P.)	Richmond (N.S.W.)
Armitage, J. L. (A.L.P.)	Chifley (N.S.W.)
Aston, Hon. W. J. (Lib.)	Phillip (N.S.W.)
Barnard, L. H. (A.L.P.)	Bass (T.)
Barnes, Hon. C. E. (C.P.)	McPherson (Q.)
Bate, H. J. (Lib.)	Macarthur (N.S.W.)
Beazley, K. E. (A.L.P.)	Fremantle (W.A.)
Bennett, A. F. (A.L.P.)	Swan (W.A.)
Berinson, J. M. (A.L.P.)	Perth (W.A.)
Birrell, F. R. (A.L.P.)	Port Adelaide (S.A.)
Bonnett, R. N. (Lib.)	Herbert (Q.)
Bowen, L. F. (A.L.P.)	Kingsford-Smith (N.S.W.)
Bowen Hon. N. H., Q.C. (Lib.)	Parramatta (N.S.W.)
Brown, N. A. (Lib.)	Diamond Valley (V.)
Bryant, G. M. (A.L.P.)	Wills (V.)
Buchanan, A. A. (Lib.)	McMillan (V.)
Bury, Hon. L. H. E. (Lib.)	Wentworth (N.S.W.)
Cairns, J. F. (A.L.P.)	Lalor (V.)
Cairns, K. M. K. (Lib.)	Lilley (Q.)
Calder, S. E., D.F.C. (C.P.)	Northern Territory
Calwell, Rt Hon. A. A. (A.L.P.)	Melbourne (V.)
Cameron, C. R. (A.L.P.)	Hindmarsh (S.A.)
Cameron, D. M. (Lib.)	Griffith (Q.)
Cass, M. H. (A.L.P.)	Maribyrnong (V.)
Chipp, Hon. D. L. (Lib.)	Hotham (V.)
Cohen, B. (A.L.P.)	Robertson (N.S.W.)
Collard, F. W. (A.L.P.)	Kalgoorlie (W.A.)
Connor, R. F. X. (A.L.P.)	Cunningham (N.S.W.)
Cope, J. F. (A.L.P.)	Sydney (N.S.W.)
Corbett, J. (C.P.)	Maranoa (Q.)
Cramer, Hon. Sir John (Lib.)	Bennelong (N.S.W.)
Crean, F. (A.L.P.)	Melbourne Ports (V.)
Cross, M. D. (A.L.P.)	Brisbane (Q.)
Daly, F. M. (A.L.P.)	Grayndler (N.S.W.)
Davies, R. (A.L.P.)	Braddon (T.)
Dobie, J. D. M. (Lib.)	Cook (N.S.W.)
Drury, E. N. (Lib.)	Ryan (Q.)
Duthie, G. W. A. (A.L.P.)	Wilmot (T.)
England, J. A., E.D. (C.P.)	Calare (N.S.W.)
Erwin, Hon. G. D. (Lib.)	Ballaarat (V.)
Everingham, D. N. (A.L.P.)	Capricornia (Q.)
Fairbairn, Hon. D. E., D.F.C. (Lib.)	Farrer (N.S.W.)
Fitzpatrick, J. (A.L.P.)	Darling (N.S.W.)
Forbes, Hon. A. J., M.C. (Lib.)	Barker (S.A.)
Foster, N. K. (A.L.P.)	Sturt (S.A.)
Fox, E. M. C. (Lib.)	Henty (V.)
Fraser, A. D. (A.L.P.)	Eden-Monaro (N.S.W.)
Fraser, Hon. J. M. (Lib.)	Wannon (V.)
Fraser, J. R. (A.L.P.)	Aust. Cap. Terr.
Fulton, W. J. (A.L.P.)	Leichhardt (Q.)
Garland, R. V. (Lib.)	Curtin (W.A.)
Garrick, H. J. (A.L.P.)	Batman (V.)
Giles, G. O'H. (Lib.)	Angas (S.A.)
Gorton, Rt Hon. J. G. (Lib.)	Higgins (V.)
Graham, B. W. (Lib.)	North Sydney (N.S.W.)
Grassby, A. J. (A.L.P.)	Riverina (N.S.W.)
Griffiths, C. E. (A.L.P.)	Shortland (N.S.W.)
Gun, R. T. (A.L.P.)	Kingston (S.A.)
Hallett, J. M. (C.P.)	Canning (W.A.)
Hamer, D. J. (Lib.)	Isaacs (V.)
Hansen, B. P. (A.L.P.)	Wide Bay (Q.)
Hayden, W. G. (A.L.P.)	Oxley (Q.)
Holten, Hon. R. McN. (C.P.)	Indi (V.)
Howson, Hon. P. (Lib.)	Casey (V.)
Hughes, Hon., T. E. F., Q.C. (Lib.)	Berowra (N.S.W.)
Hulme, Hon. A. S. (Lib.)	Petrie (Q.)
Hunt, R. J. D. (C.P.)	Gwydir (N.S.W.)
Hurford, C. J. (A.L.P.)	Adelaide (S.A.)
Irwin, L. H., M.B.E. (Lib.)	Mitchell (N.S.W.)
Jacobi, H. R. (A.L.P.)	Hawker (S.A.)
James, A. W. (A.L.P.)	Hunter (N.S.W.)
Jarman, A. W. (Lib.)	Deakin (V.)
Jenkins, H. A. (A.L.P.)	Scullin (V.)
Jess, J. D. (Lib.)	La Trobe (V.)
Johnson, L. K. (A.L.P.)	Burke (V.)

MEMBERS OF THE COMMONWEALTH PARLIAMENT
25 NOVEMBER 1969—*continued*

THE HOUSE OF REPRESENTATIVES—*continued*

Member	*Division*
Johnson, L. R. (A.L.P.)	Hughes (N.S.W.)
Jones, C. K. (A.L.P.)	Newcastle (N.S.W.)
Katter, R. C. (C.P.)	Kennedy (Q.)
Keating, P. J. (A.L.P.)	Blaxland (N.S.W.)
Kelly, Hon. C. R. (Lib.)	Wakefield (S.A.)
Kennedy, A. D. (A.L.P.)	Bendigo (V.)
Kent Hughes, Hon. Sir Wilfrid, K.B.E., M.V.O., M.C., E.D. (Lib.)	Chisholm (V.)
Keogh, L. J. (A.L.P.)	Bowman (Q.)
Killen, Hon. D. J. (Lib.)	Moreton (Q.)
King, R. S. (C.P.)	Wimmera (V.)
Kirwan, F. McL. (A.L.P.)	Forrest (W.A.)
Klugman, R. E. (A.L.P.)	Prospect (N.S.W.)
Luchetti, A. S. (A.L.P.)	Macquarie (N.S.W.)
Lucock, P. E. (C.P.)	Lyne (N.S.W.)
Lynch, Hon. P. R. (Lib.)	Flinders (V.)
Mackay, M. G. (Lib.)	Evans (N.S.W.)
MacKellar, M. J. R. (Lib.)	Warringah (N.S.W.)
Maisey, D. W. (C.P.)	Moore (W.A.)
Martin, V. J. (A.L.P)	Banks (N.S.W.)
McEwen, Rt Hon. J., C.H. (C.P.)	Murray (V.)
McIvor, H. J. (A.L.P.)	Gellibrand (V.)
McLeay, J. E. (Lib.)	Boothby (S.A.)
McMahon, Rt Hon. W. (Lib.)	Lowe (N.S.W.)
Morrison, W. L. (A.L.P.)	St George (N.S.W.)
Nicholls, M. H. (A.L.P.)	Bonython (S.A.)
Nixon, Hon. P. J. (C.P.)	Gippsland (V.)
O'Keefe, F. L. (C.P.)	Paterson (N.S.W.)
Patterson, R. A. (A.L.P)	Dawson (Q.)
Peacock, Hon. A. S. (Lib.)	Kooyong (V.)
Pettitt, J. A. (C.P.)	Hume (N.S.W.)
Reid, L. S. (Lib.)	Holt (V.)
Reynolds, L. J. (A.L.P.)	Barton (N.S.W.)
Robinson, I. L. (C.P.)	Cowper (N.S.W.)
Scholes, G. G. D. (A.L.P.)	Corio (V.)
Sherry, R. H. (A.L.P.)	Franklin (T.)
Sinclair, Hon. I. McC. (C.P.)	New England (N.S.W.)
Snedden, Hon. B. M., Q.C. (Lib.)	Bruce (V.)
Solomon, R. J. (Lib.)	Denison (T.)
Stewart, F. E. (A.L.P.)	Lang (N.S.W.)
Street, A. A. (Lib.)	Corangamite (V.)
Swartz, Hon. R. W. C., M.B.E., E.D. (Lib.)	Darling Downs (Q.)
Turnbull, W. G., C.B.E. (C.P.)	Mallee (V.)
Turner, H. B. (Lib.)	Bradfield (N.S.W.)
Uren, T. (A.L.P.)	Reid (N.S.W.)
Wallis, L. G. (A.L.P.)	Grey (S.A.)
Webb, C. H. (A.L.P.)	Stirling (W.A.)
Wentworth, Hon. W. C. (Lib.)	Mackellar (N.S.W.)
Whitlam, E. G., Q.C. (A.L.P.)	Werriwa (N.S.W.)
Whittorn, R. H. (Lib.)	Balaclava (V.)

Representation of the Parties in the House of Representatives is as follows: A.L.P., 59; Lib., 46; C.P., 20.

State Ministries, page 57

STATE MINISTERS

VICTORIA, SOUTH AUSTRALIA AND WESTERN AUSTRALIA

No change as from page 57–58

TASMANIA

(*From 27 May 1969*)

Premier, Treasurer and Minister in Charge of Hydro-electric Commission—
THE HON. W. A. BETHUNE, M.H.A. (Lib.)

Deputy Premier, Chief Secretary and Minister for Tourists—
THE HON. K. O. LYONS, M.H.A. (A.C.P.)

Minister for Education—
THE HON. R. MATHER, M.H.A. (Lib.)

Minister for Agriculture and Forests—
THE HON. E. C. BEATTIE, M.H.A. (Lib.)

Attorney-General, Minister for Police and Licensing—
THE HON. E. M. BINGHAM, M.H.A. (Lib.)

Minister for Lands and Works and Local Government—
THE HON. W. G. BARKER, M.H.A. (Lib.)

Minister for Transport, Racing and Gaming and Mines—
THE HON. L. H. BESSELL, M.H.A. (Lib.)

Minister for Development, Housing and Fisheries—
THE HON. D. F. Clark, M.H.A. (Lib.)

Minister for Health and Road Safety—
THE HON. N. D. ABBOTT, M.H.A. (Lib.)

NEW SOUTH WALES

(*From 11 February 1969*)

Premier and Treasurer—
THE HON. R. W. ASKIN, M.L.A. (Lib.)

Deputy Premier, Minister for Education, and Minister for Science—
THE HON. C. B. CUTLER, E.D., M.L.A. (C.P.)

Minister for Labour and Industry, Chief Secretary, and Minister for Tourism—
THE HON. E. A. WILLIS, M.L.A. (Lib.)

Minister for Decentralisation and Development, and Vice-President of the Executive Council—
THE HON. J. B. M. FULLER, M.L.C. (C.P.)

Minister for Public Works—
THE HON. D. HUGHES, M.L.A. (C.P.)

Attorney-General—
THE HON. K. M. MCCAW, M.L.A. (Lib.)

Minister for Local Government and Minister for Highways—
THE HON. P. H. MORTON, M.L.A. (Lib.)

Minister for Transport
THE HON. M. A. MORRIS, M.L.A. (Lib.)

Minister for Lands—
THE HON. T. L. LEWIS, M.L.A. (Lib.)

Minister for Conservation—
THE HON. J. G. BEALE, M.L.A. (Lib.)

Minister for Agriculture—
THE HON. G. R. CRAWFORD, D.C.M., M.L.A. (C.P.)

Minister for Housing and Minister for Co-operative Societies—
THE HON. S. T. STEPHENS, M.L.A. (C.P.)

Minister of Justice—
THE HON. J. C. MADDISON, M.L.A. (Lib.)

Minister for Health—
THE HON. A. H. JAGO, M.L.A. (Lib.)

Minister for Mines—
THE HON. W. C. FIFE, M.L.A. (Lib.)

Minister for Child Welfare and Minister for Social Welfare—
THE HON. F. M. HEWITT, M.L.C. (Lib.)

Assistant Minister—
THE HON. J. L. WADDY, O.B.E., D.F.C., M.L.A. (Lib.)

Assistant Minister—
THE HON. G. F. FREUDENSTEIN, M.L.A. (C.P.)

QUEENSLAND

(*From 4 September 1969*)

Premier and Minister for State Development—
THE HON. J. BJELKE-PETERSEN, M.L.A. (C.P.)

Treasurer—
THE HON. G. W. W. CHALK, M.L.A. (Lib.)

Minister for Mines and Main Roads—
THE HON. R. E. CAMM, M.L.A. (C.P.)

Minister for Justice and Attorney-General—
THE HON. P. R. DELAMOTHE, O.B.E., M.L.A. (Lib.)

Minister for Education and Cultural Activities—
THE HON. A. R. FLETCHER, M.L.A. (C.P.)

Minister for Primary Industries—
THE HON. J. A. ROW, M.L.A. (C.P.)

Minister for Health—
THE HON. S. D. TOOTH, M.L.A. (Lib.)

Minister for Labour and Tourism—
THE HON. J. D. HERBERT, M.L.A. (Lib.)

Minister for Transport—
THE HON. W. E. KNOX, M.L.A. (Lib.)

Minister for Industrial Development—
THE HON. F. A. CAMPBELL, M.L.A. (Lib)

Minister for Lands—
THE HON. V. B. SULLIVAN, M.L.A. (C.P.)

Minister for Works and Housing—
THE HON. A. M. HODGES, M.L.A. (C.P.)

Minister for Conservation, Marine and Aboriginal Affairs—
THE HON. N. T. E. HEWITT, M. M., M.L.A. (C.P.)

Minister for Local Government and Electricity—
THE HON. W. A. R. RAE, M.L.A. (C.P.)

CHAPTER 10. LABOUR, WAGES AND PRICES

WHOLESALE PRICES AND PRICE INDEXES

Wholesale Price Index of Materials used in Building other than House Building

General

This index was introduced in April 1969 and relates to the construction of buildings other than houses. It is the first of a series of indexes which will be prepared as circumstances permit and which will relate to materials used and articles produced by important and defined areas (or 'sectors') of the economy. To a considerable extent it provides an up-to-date replacement for the Building Materials group of the Wholesale Price (Basic Materials and Foodstuffs) Index.

Further information concerning the method of compiling the Index, as well as more detailed group index numbers for each capital city, will be found in the publication *Price Index of Materials used in Building other than House Building* (reference no. 9.6) of 23 April 1969 and subsequent issues, as well as in the Appendix to *Labour Report* No. 53.

Scope and composition

The index measures changes in prices of selected materials used in the construction of buildings other than houses and 'low-rise' flats (in general, those up to three storeys).

Its composition is in accordance with the materials usage in actual building projects which were selected as representative for the purpose. The building 'use-types' (e.g. office building, factory, etc.) directly represented are:

(i) 'High-rise' flats (in general, those of more than three storeys)
(ii) Offices
(iii) Factories
(iv) Health buildings (i.e. hospitals, nurses' quarters, clinics, etc.)
(v) Education buildings (i.e. schools, universities, kindergartens, etc.)
(vi) Other Commercial Premises (i.e. the Building Statistics categories of Hotels, Hostels, etc.; Shops; and Other Business Premises).

The completed values of these types of buildings constituted approximately 86 per cent of the completed values of all new buildings other than houses and low-rise flats in the years 1964–65 to 1966–67 inclusive. Not directly represented are buildings for entertainment and recreation purposes, buildings for religious purposes, and the Building Statistics category 'Miscellaneous' buildings.

The index includes 72 items, combined in eleven groups, in addition to an 'All Groups' index. Some items carry the weights of similar items not directly priced. Items are described in terms of fixed specifications with the aim of recording price changes for representative materials of constant quality.

Although the selected materials (or many of them) are also used in house (and low-rise flat) building, in building repair, maintenance and alteration work, and in 'engineering construction' work (e.g. projects such as roads, dams, bridges and the like), the weighting pattern of the index, being designed for the specific purpose mentioned in the first paragraph of this Section, is not applicable to these other activities of the Construction industry. In addition, since the weights are based on an average materials usage over the stated range of building use-types, the index is not necessarily applicable to any specific building or any of the separate use-types.

Base period and method of calculation

The reference base of the index is the year 1966–67 = 100.0. The weighting base corresponds broadly with the reference base, but does not exactly coincide because of the nature of the data from which the weights were derived.

The index is a fixed-weights index and is calculated by the method known as 'the weighted arithmetic mean of price relatives'.

Derivation of items and weights

The items and weights used in the index were derived from reported values of each material used in selected representative buildings constructed in or about 1966–67. The selection took account of building use-type and construction characteristics (e.g. type of frame, wall, floor, etc.) within use-types. Information of the former was obtained from building statistics, and of the latter from an ad hoc survey of approximately 800 buildings.

The form used to obtain particulars of materials used in each selected building was set out on a 'trades' basis in the manner employed in a Bill of Quantities, using trades headings broadly based on those set out in the second edition of the *Australian Standard Method of Measurement of Building Works*. Under each heading it was required that each material used in that particular phase of building should be specified, together with its value.

Satisfactory analyses were received for 83 buildings, whose aggregate value was equivalent to approximately ten per cent of the value of building (other than house building) completed during 1966–67. The data from these analyses were combined to obtain a single list of materials and values relating to the sum of all building use-types directly represented in the index. Within each use-type the data were combined in accordance with the estimated relative importance of buildings of different value sizes. The data for the different use-types were then combined in accordance with their relative proportions by value in building commencements in Australia over the three years ended June 1967. The final step was to combine the hundreds of different varieties, etc., of materials into index items and to determine groupings thereof.

The weights

The weighting pattern used in the index is given on pages 1259–60. This single weighting pattern, relating to the whole of Australia, is applied (with minor exceptions) to local price measures in calculating indexes for each State capital city.

The index for the six State capital cities combined is a weighted average of individual city indexes. The relative weighting of the capitals is in proportion to the estimated value on completion of building other than house building in the separate States during the three years ended June 1967.

Prices

Price series used relate to specified standards of each commodity and are obtained in all State capital cities from representative suppliers of materials used in building. In the main they are collected as at the mid-point of the month to which the index refers, or as near thereto as practicable. However, the indicator used for the group Electrical Installation Materials is the existing wholesale price index described on pages 254–6, for which index prices were obtained each February, May, August and November until February 1969 when monthly compilation was commenced. In the Electrical Installation Materials group index observations are therefore quarterly up to February 1969, with the last observed level being used in intervening months, and monthly from February 1969 onwards.

There are some exceptions to the use of local prices in the indexes for each metropolitan area. In a few cases where suitable price series are not currently available for an item in a given city, imputation is necessary. For each metropolitan area, the whole of the group Electrical Installation Materials and the majority of the items in the group Mechanical Services Components are based on Sydney and Melbourne price series.

The point of pricing adopted for the new index is in keeping with sector wholesale price index concept. In terms of this concept a 'ring-fence' is set up around building other than house building. The items to be priced for index purposes are then those materials which are used in building activity within the ring-fence, and the point of pricing is that at which the materials cross the ring-fence. In general, this is the price 'delivered on-site'.

Index numbers

The index has been compiled for each month from July 1966, and for the financial years from 1966–67. Index numbers for the individual groups and all groups for the weighted average of the six State capital cities, and for all groups combined for each State capital city, are given on pages 1256–58. Figures are published to one decimal place to avoid distortions that would occur in rounding off the index numbers to the nearest whole number.

The separate city indexes measure price movements in each State capital city individually. They enable comparisons to be drawn between capitals as to differences in degree of price movement from period to period, but not as to differences in price level.

WHOLESALE PRICE INDEX OF MATERIALS USED IN BUILDING OTHER THAN HOUSE BUILDING

GROUP INDEX NUMBERS—WEIGHTED AVERAGE OF SIX STATE CAPITAL CITIES

(*Base of each Index: Year* 1966–67 = 100.0)(*a*)

Period	*Concrete mix, cement, sand, etc.*	*Cement products*	*Bricks, stone, etc.*	*Timber, board and joinery*	*Steel and iron products*	*Aluminium products*
1966–67 . . .	100.0	100.0	100.0	100.0	100.0	100.0
1967–68 . . .	101.5	102.2	103.7	103.0	102.3	101.4
1968–69 . . .	103.5	106.8	108.2	107.2	106.1	103.9
1966–67—						
July . . .	99.1	98.5	97.3	98.4	98.1	97.5
August . . .	99.4	98.5	99.2	98.7	99.1	98.8
September . .	99.3	98.6	99.2	98.9	99.9	98.9
October . . .	99.4	99.5	99.5	99.8	100.0	99.0
November . .	99.6	100.1	100.0	100.3	100.0	99.9
December . .	99.5	100.2	100.0	100.4	100.0	99.9
January . . .	99.5	100.6	100.0	100.5	100.0	100.4
February . .	99.6	100.6	100.0	100.4	100.4	101.1
March . . .	101.2	100.8	100.3	100.5	100.5	101.1
April . . .	101.2	100.8	101.3	100.6	100.6	101.1
May . . .	101.2	100.8	101.6	100.8	100.6	101.1
June . . .	101.2	100.9	101.6	100.8	100.8	101.1
1967–68—						
July . . .	101.3	100.9	101.6	101.2	101.2	101.2
August . . .	101.3	101.0	102.9	101.6	101.3	101.2
September . .	101.3	101.2	103.1	102.7	101.4	101.2
October . . .	101.3	101.4	103.8	102.8	101.5	101.2
November . .	101.5	102.0	103.8	103.1	101.6	101.2
December . .	101.6	102.0	104.1	103.1	101.6	101.2
January . . .	101.6	102.0	104.1	103.1	101.6	101.4
February . .	101.3	102.0	104.1	103.2	103.0	101.4
March . . .	101.5	102.1	104.1	103.3	103.3	101.4
April . . .	101.6	103.4	104.1	103.7	103.5	101.4
May . . .	101.6	104.0	104.1	103.9	103.6	101.3
June . . .	101.7	104.3	104.9	104.2	103.7	102.4
1968–69—						
July . . .	101.9	104.3	105.1	104.2	103.9	102.9
August . . .	102.1	104.4	105.5	104.8	103.9	103.0
September . .	102.1	104.5	105.6	105.0	104.5	102.9
October . . .	102.1	104.8	106.5	105.3	105.0	104.0
November . .	102.0	105.4	108.7	106.4	105.5	104.0
December . .	104.5	106.9	109.1	107.4	105.7	104.3
January . . .	104.6	107.1	109.2	107.5	106.8	104.4
February . .	104.7	107.5	109.4	108.0	107.1	104.1
March . . .	102.8	107.8	109.6	108.5	107.3	104.0
April . . .	105.0	109.1	109.6	109.2	107.5	104.1
May . . .	105.0	109.7	109.6	109.4	108.0	104.4
June . . .	105.1	109.9	109.9	110.1	107.9	105.1

(*a*) Figures are shown to one decimal place to avoid distortions that would occur in rounding off the index numbers to the nearest whole number.

WHOLESALE PRICE INDEX OF MATERIALS USED IN BUILDING OTHER THAN HOUSE BUILDING

GROUP INDEX NUMBERS—WEIGHTED AVERAGE OF SIX STATE CAPITAL CITIES—*continued*

(*Base of each Index: Year* 1966–67 = 100.0)(*a*)

Period	*Other metal products*	*Plumbing fixtures*	*Miscellaneous materials*	*Electrical installation materials*(*b*)	*Mechanical services components*	*All Groups*
1966–67 . . .	100.0	100.0	100.0	100.0	100.0	100.0
1967–68 . . .	105.9	102.8	102.3	100.9	101.4	102.2
1968–69 . . .	106.8	103.3	103.2	102.1	107.7	105.6
1966–67—						
July . . .	89.4	99.6	98.7	94.3	99.5	97.9
August . . .	107.6	99.6	98.8	100.7	99.7	99.5
September . .	94.9	99.6	99.0	100.7	100.4	99.5
October . . .	99.7	99.7	99.5	100.7	100.4	99.9
November . .	104.1	100.0	100.3	101.4	100.5	100.3
December . .	104.1	100.0	100.3	101.4	100.5	100.3
January . . .	104.1	100.0	100.4	101.4	100.4	100.4
February . .	104.1	99.8	100.1	101.6	100.4	100.5
March . . .	103.9	100.3	100.4	101.6	99.8	100.7
April . . .	96.0	100.3	100.6	101.6	99.5	100.6
May . . .	96.1	100.3	100.8	97.5	99.5	100.3
June . . .	96.1	100.7	101.2	97.5	99.5	100.4
1967–68—						
July . . .	96.0	100.7	101.3	97.5	100.0	100.6
August . . .	95.9	101.4	101.4	97.6	99.3	100.7
September . .	96.5	103.5	101.6	97.6	99.9	101.0
October . . .	98.4	103.3	101.5	97.6	99.9	101.1
November . .	110.8	103.3	102.0	102.2	100.4	102.1
December . .	110.8	103.3	102.7	102.2	100.4	102.1
January . . .	110.8	103.3	102.7	102.2	100.6	102.2
February . .	110.8	103.3	102.8	104.0	102.2	102.9
March . . .	116.3	103.3	102.7	104.0	102.7	103.3
April . . .	116.3	103.3	102.8	104.0	102.7	103.5
May . . .	106.4	102.6	102.8	100.9	104.0	103.2
June . . .	101.2	102.6	102.7	100.9	104.8	103.3
1968–69—						
July . . .	100.3	102.5	103.3	100.9	105.3	103.5
August . . .	100.4	102.0	103.3	99.0	105.6	103.5
September . .	101.3	102.0	103.3	99.0	106.0	103.8
October . . .	102.3	102.0	103.1	99.0	107.0	104.2
November . .	102.8	102.2	103.1	100.2	108.1	104.9
December . .	105.3	103.0	102.7	100.2	108.1	105.5
January . . .	105.4	102.6	102.5	100.2	108.1	105.9
February . .	109.5	102.5	103.3	104.1	108.3	106.5
March . . .	109.9	104.5	103.3	104.6	108.7	106.6
April . . .	111.7	105.3	103.4	105.0	108.9	107.2
May . . .	114.8	105.3	103.6	105.7	109.2	107.6
June . . .	117.9	105.3	103.6	107.2	109.4	107.9

(*a*) Figures are shown to one decimal place to avoid distortions that would occur in rounding off the index numbers to the nearest whole number. (*b*) The Wholesale Price Index of Electrical Installation Materials is used as the indicator for this group. This indicator was on a quarterly basis until February 1969 when monthly compilation was commenced.

WHOLESALE PRICE INDEX OF MATERIALS USED IN BUILDING OTHER THAN HOUSE BUILDING

ALL GROUPS INDEX NUMBERS—SIX STATE CAPITAL CITIES

(*Base of each Index: Year* 1966–67 = 100.0)(*a*)

NOTE. The separate city indexes measure price movements within each city individually. They do not compare price levels as between cities.

Period	*State capital cities*						*Weighted average of six State capital cities*
	Sydney	*Melbourne*	*Brisbane*	*Adelaide*	*Perth*	*Hobart*	
1966–67	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1967–68	102.6	101.7	102.2	101.8	102.0	102.3	102.2
1968–69	106.5	105.0	105.1	105.0	104.7	105.1	105.6
1966–67—							
July	97.4	98.2	98.0	98.5	98.1	97.8	97.9
August	99.1	99.6	99.7	99.9	99.8	99.5	99.5
September	99.3	99.6	99.6	99.6	99.7	99.7	99.5
October	99.7	100.1	99.8	99.8	99.9	99.9	99.9
November	100.3	100.4	100.3	100.3	100.3	100.3	100.3
December	100.3	100.4	100.2	100.3	100.3	100.5	100.3
January	100.3	100.4	100.4	100.3	100.3	100.5	100.4
February	100.5	100.6	100.7	100.4	100.3	100.7	100.5
March	100.9	100.5	100.6	100.5	100.4	100.6	100.7
April	100.9	100.3	100.5	100.3	100.2	100.4	100.6
May	100.5	99.9	100.3	100.0	100.4	100.1	100.3
June	100.7	99.9	100.3	100.0	100.4	100.2	100.4
1967–68—							
July	100.9	100.3	100.6	100.2	100.6	100.8	100.6
August	101.1	100.2	100.8	100.4	100.6	100.8	100.7
September	101.6	100.4	101.0	100.5	100.9	100.9	101.0
October	101.7	100.5	101.1	100.6	101.2	101.0	101.1
November	102.6	101.4	102.1	101.6	102.0	101.9	102.1
December	102.6	101.5	102.2	101.7	102.2	101.9	102.1
January	102.6	101.6	102.2	101.8	102.2	101.9	102.2
February	103.1	102.7	103.2	102.9	102.6	103.2	102.9
March	103.6	102.9	103.3	103.2	102.9	103.5	103.3
April	103.7	103.1	103.4	103.2	102.9	103.8	103.5
May	103.6	102.8	103.1	102.9	102.6	103.6	103.2
June	103.8	102.8	103.1	103.0	102.9	103.8	103.3
1968–69—							
July	104.1	102.9	103.2	103.4	103.1	103.8	103.5
August	104.2	102.9	103.0	103.3	103.2	103.7	103.5
September	104.6	103.2	103.1	103.4	103.5	103.8	103.8
October	104.9	103.9	103.5	103.7	103.8	104.0	104.2
November	105.6	104.6	104.3	104.2	104.4	104.5	104.9
December	106.5	104.8	105.5	104.6	104.5	104.7	105.5
January	106.8	105.2	105.9	105.1	104.8	105.1	105.9
February	107.5	105.8	106.5	105.8	105.5	105.5	106.5
March	107.9	106.0	104.9	106.4	105.7	106.1	106.6
April	108.3	106.4	106.7	106.5	105.8	106.1	107.2
May	108.8	106.6	107.5	106.9	106.0	106.6	107.6
June	109.2	107.1	107.6	107.1	106.4	106.9	107.9

(*a*) Figures are shown to one decimal place to avoid distortions that would occur in rounding off the index numbers to the nearest whole number.

WHOLESALE PRICE INDEX OF MATERIALS USED IN BUILDING OTHER THAN HOUSE BUILDING

COMPOSITION AND WEIGHTING PATTERN AS AT REFERENCE BASE YEAR: 1966-67

	Percentage contribution of	
Group and item	*Item to group index*	*Group to All Groups index*
1. *Concrete mix, cement, sand, etc.*		10.41
Concrete, ready-mixed	80.23	
Cement	8.58	
Sand	4.66	
Aggregate	4.56	
Lime	1.97	
2. *Cement products*		3.64
Asbestos cement sheets	32.40	
Concrete masonry blocks	32.99	
Pre-cast concrete panels	19.73	
Other pre-cast concrete products (beams, slabs, pipes and fittings)	14.88	
3. *Bricks, stone, etc.*		5.28
Clay bricks	71.64	
Earthenware pipes and fittings	11.66	
Terrazzo	10.94	
Building stone	5.76	
4. *Timber, board and joinery*		11.90
Timber—hardwood	27.11	
Timber—softwood	12.93	
Plywood	9.34	
Hardboard and softboard	4.42	
Partitions	13.71	
Doors, ready made	7.07	
Other joinery	25.42	
5. *Steel and iron products*		30.58
Structural steel	47.15	
Reinforcing rods	11.68	
Reinforcing fabric	3.85	
Steel doors and frames	3.69	
Steel window frames	1.79	
Steel louvre frames and screens	1.09	
Steel roller shutters and grilles	1.82	
Steel balustrading	1.70	
Steel angles and sections	1.93	
Steel suspended ceilings	1.16	
Galvanised steel decking and cladding	9.11	
Galvanised steel sheet and sheet products	4.76	
Galvanised steel chainwire partitions and fences	1.61	
Galvanised steel wire fabric and ties	0.41	
Steel pipes and fittings	1.99	
Cast iron pipes and other cast iron products	2.36	
Hinges, catches, handles, bolts, etc.	2.87	
Nails, screws, etc.	1.03	
6. *Aluminium products*		6.01
Aluminium window frames	59.89	
Aluminium screens, doors, louvres, etc.	8.10	
Aluminium decking and cladding	16.72	
Aluminium downpipe and guttering	6.38	
Aluminium dampcourse and flashing	4.97	
Aluminium sections and angles	3.94	

WHOLESALE PRICE INDEX OF MATERIALS USED IN BUILDING OTHER THAN HOUSE BUILDING

COMPOSITION AND WEIGHTING PATTERN AS AT REFERENCE BASE YEAR: 1966–67—*continued*

Group and item	*Percentage contribution of*	
	Item to group index	*Group to All Groups index*
7. *Other metal products*		2.59
Copper pipes	49.11	
Copper sheet and sheet products	15.43	
Brass pipe fittings	16.64	
Taps and valves	14.03	
Lead products	4.79	
8. *Plumbing fixtures*		1.19
Toilet suites and pans	29.81	
Hand basins	21.66	
Sinks	24.18	
Urinals	20.60	
Baths	3.75	
9. *Miscellaneous materials*		7.09
Paint	17.31	
Glass	18.82	
Plaster and plaster products	9.36	
Tiles, acoustic	9.93	
Tiles, ceramic	9.94	
Tiles, vinyl	14.46	
Plastic sheeting	3.10	
Other plastic products	4.05	
Insulation	8.13	
Building paper	2.17	
Bituminous built-up roofing	2.73	
10. *Electrical installation materials*		8.61
Conductors	40.00	
Conduit and accessories	25.00	
Switchboard and switchgear materials	35.00	
11. *Mechanical services components*		12.70
Air conditioning	59.80	
Heating systems	9.33	
Elevators and escalators	16.32	
Fire protection installations	14.55	

WAGES, EARNINGS AND HOURS

Determination of Wage Rates in Australia, page 282

Equal Pay Cases 1969

Two benches of the Commonwealth Conciliation and Arbitration Commission sat jointly from 25 February 1969 to 22 May 1969 to take evidence and hear argument on trade union claims for equal pay between the sexes.

Both benches of the Commission reached a common conclusion and on 19 June 1969 published their decision and reasons for their decision. The Commission said it was prepared to implement the principle of equal pay for equal work by introducing into Commonwealth awards and determinations the principles contained in State Acts on equal pay. The Commission stated that no increases should be granted to adult females without an examination of the work done. It also suggested a number of principles to be applied in deciding applications for equal pay. In summary these were: (i) the work considered should be restricted to that performed by both adult males and adult females under terms of the same determination or award; (ii) the work should be the same or of a like nature and of equal value (from the point of view of wage or salary assessment), and to be of the same range and volume and performed under the same conditions; (iii) consideration should be restricted to the general work situation under the determination or award and not to that of one establishment; and (iv) equal pay should not be provided where the work is essentially or usually performed by females but upon which male employees may also be employed.

The Commission decided that implementation of equal pay should be spread over a period so that as from 1 January 1970 implementation would be the same as that under South Australian, Western Australian and Tasmanian Acts. Where a decision was reached prior to 1 October 1969 the female rate would become 85 per cent of the male rate from the beginning of the first pay period to commence on or after 1 October 1969, increase to 90 per cent of the male rate from the beginning of the first pay period to commence on or after 1 January 1970, increase to 95 per cent of the male rate from the beginning of the first pay period to commence on or after 1 January 1971, and become equal to the male rate from the beginning of the first pay period to commence on or after 1 January 1972. Where a decision was reached on or after 1 October 1969 it should not operate retrospectively. For decisions reached between 1 October 1969 and up to 1 January 1970, 85 per cent of the male rate at the date of operation should apply, and so on according to the above scale. No female rates should be reduced by operation of these formulae.

CHAPTER 19. PUBLIC FINANCE

COMMONWEALTH FINANCE

Commonwealth Budget, 1969-70

(*see* page 1245 for particulars of 1968–69 Budget)

The 1969–70 Commonwealth Budget provided for an estimated outlay of $7,085 million ($6,559 million in 1968–69) and estimated receipts of $7,055 million ($6,174 million) in 1968–69). The deficit for 1969–70 was thus estimated at $30 million ($385 million in 1968–69).

Outlay

The main increases in Budget allocation in 1969–70 over 1968–69 were in the fields of cash benefits to persons (from $1,406 million to $1,591 million), and grants to the States (from $1,419 million to $1,610 million). The estimated increase in cash benefits to persons is due mainly to increased pensions and allowances. The main increases were as follows.

Health Benefits. Tuberculosis allowances: From 9 October 1969 the weekly rates payable are $18.25 for a single person, $29.75 for a man and wife, $2.50 for the first child under 16 years and $3.50 for each subsequent dependent child under 16 years. (*See* Chapter 14, Public Health, Commonwealth Government Activities, page 467).

Social Services Benefits. Increased weekly rates payable from 9 October 1969 are as follows. Age and invalid pensions: single rate, $15; married rate (both eligible), $13.25 each. Widows pensions: Class 'A', $15 with a mother's allowance of $4 ($6 if caring for a child under 6 years or an invalid child requiring full-time care); Class 'B' and Class 'C', $13.25. Sheltered employment allowances: single rate, $15; married rate (both eligible), $13.25 each. Unemployment, sickness and special benefits: adult or married minor, $10 with a wife's allowance of $7; person 18 and under 21 years $6; person 16 and under 18 years, $4.50. Allowances to pensioners, etc., for the second and subsequent dependent children were also increased, from $2.50 to $3.50 a week.

A personal care subsidy of $5 a week became payable under certain conditions in respect of persons 80 years or more who reside in hostel-type accommodation eligible under the *Aged Persons Home Act* (*see* Chapter 13, Welfare Services).

Repatriation Pensions. From October 1969 the maximum weekly rates payable for war pensions are: special (T.P.I.) rate, $36; intermediate rate, $26.50; general rate, $12, with special compensation allowance of $5; war widows, $15 with a domestic allowance of $7.50.

Service pensions were also increased to equal the new rates payable for age and invalid pensions (*see* Chapter 5, Repatriation).

Receipts

Of the expected increase of $881 million in receipts, it was estimated that $800 million would be derived from increased taxation collections, mainly at the same rates as in 1968–69. Amendments were proposed to income tax law relating to age allowances, convertible notes, capital subscriptions to mining and other companies and deductions for structural improvements by primary producers. Relaxation of estate duty law was also proposed, to grant some relief in the case of estates of primary producers not exceeding $250,000 value for duty. In addition, air navigation charges payable by the air transport industry for the use of airport and airway facilities provided by the Commonwealth were increased by 10 per cent.

LIST OF SPECIAL ARTICLES AND MISCELLANEOUS MATTER CONTAINED IN PREVIOUS ISSUES

This list refers to special articles and other more or less important miscellaneous matter which have appeared in previous issues of the Year Book but which are not included, or are included in abbreviated form only, in the present issue.

The figures below indicate, respectively, the number and page of the Year Book to which reference is made. In cases where matter was published in more than one previous issue, the volume and page for the last issue containing such matter are given. For possible revisions, however, issues immediately following the one referred to should also be consulted.

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GENERAL INDEX*

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